What You Should Know

about the

Aliso Canyon Blowout Disaster

This is a detailed analysis of new evidence of health concerns in the exposed community affected by the Aliso Canyon blowout, the largest methane and toxic chemical exposure in US history. In the process of my investigation, I have uncovered what I believe is unlawful behavior by our state agencies and the Los Angeles County health regulators. This is supported by documents and exhibits which clearly validate my claims.

Jeffery B. Nordella, M.D.

October 10, 2019

Preface

In the United States of America, we have State and Federal governments. Within our government lies governing regulators who have the responsibility to protect our citizens making sure that private industry profits do not supersede the safety and the health of its people.

These regulators are selected by and are under the direction of elected supervisors and politicians, who are not beyond reproach. This is the unfortunate reality of our system as explained to me by one politician who has been involved in it for over 40 years. It is the philosophy of horse trading, which is when you ask for something you need to be willing to give something. Without it we are just one of many without power to implement change. What we are left with is the ability to express our opinion which should not be underestimated. The Aliso Canyon disaster is one of those instances, where the public must demand the elected politicians and their regulators put the health and safety of their constituents first.

If you are an involved party, a citizen, media representative, or politician, and you are reading this document please think of yourself as a juror, as one would say a juror of public opinion. You will be presented the facts supported by evidence. To be fair you might say that you have not heard the other side of the story, but please keep in mind that all of the evidence is their testimony both documented and signed.

Now in the face of the nation's largest natural gas blowout and being mindful of the complexity of the poly toxins the citizens have been exposed to, have the regulators failed their duties all for predetermined political and financial agendas?

In the interest of full transparency, I lay the following on your doorstep so that you will be informed of the facts!

What You Should Know!
The Aliso Canyon Blowout Disaster

Introduction

On October 23, 2015 through February 18, 2016 approximately 110,000 metric tons of poly-toxins were emitted from the Southern California Gas Aliso Canyon SS-25 well from approximately 8,000 feet under the ground and under extreme pressures. It created a plume of toxic chemicals that showered down on potentially hundreds of thousands of people for 16 weeks.

The Aliso Canyon blowout generated **220 times more**, by volume, than the Deepwater Horizon oil release in the Gulf of Mexico, yet it was not visible to the human eye. However, using infrared camera technology like below, illustrates how close the largest natural gas and chemical disaster in the nation's history is to an innocent community. Why the lack of attention?

Who was exposed?

An undefined number were exposed including adults, the elderly, the homeless, pregnant women, children, and pets all of whom were either with or without pre-existing health conditions. The chemical release knew no physical boundary nor was anyone spared in its path.

What were they exposed to?

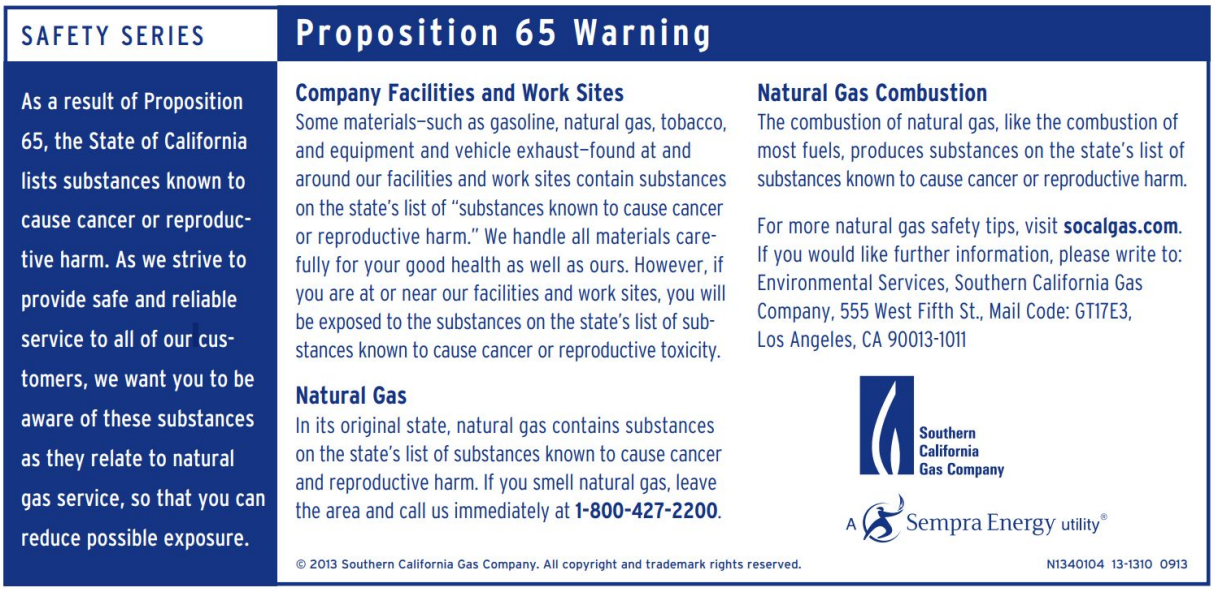
SoCalGas and LA County Department of Public Health (**DPH**), claimed the community's symptomatology was due to exposure to **methane and the added sulfur-like odorant, mercaptan. On that basis DPH's** scientific opinions on health effects were as follows: **"there were no long-term health effects".** As demonstrated in these two documents from California's primary health agencies:

- **DPH to the community May 13, 2016 - (Exhibit A)**
- **OEHHA to the community May 22, 2018 - (Exhibit B)**

In a Joint Legislative hearing on August 6, 2019 there was public testimony, specifically Dr. Cyrus Rangan, Director of the Toxics Epidemiology Program at the Los Angeles County Department of Public Health stated that the public health department is the only public agency that can make a health hazard assessment.

The regulators and specifically the MD's state there are no long term health effects. This is in clear contradiction to the admission by SoCalGas through the State of California's Proposition 65.

So, is **DPH ignoring Proposition 65?** Below is what is included in resident's SoCalGas monthly bill:



SAFETY SERIES

As a result of Proposition 65, the State of California lists substances known to cause cancer or reproductive harm. As we strive to provide safe and reliable service to all of our customers, we want you to be aware of these substances as they relate to natural gas service, so that you can reduce possible exposure.

Proposition 65 Warning

Company Facilities and Work Sites
Some materials–such as gasoline, natural gas, tobacco, and equipment and vehicle exhaust–found at and around our facilities and work sites contain substances on the state's list of "substances known to cause cancer or reproductive harm." We handle all materials carefully for your good health as well as ours. However, if you are at or near our facilities and work sites, you will be exposed to the substances on the state's list of substances known to cause cancer or reproductive toxicity.

Natural Gas
In its original state, natural gas contains substances on the state's list of substances known to cause cancer and reproductive harm. If you smell natural gas, leave the area and call us immediately at **1-800-427-2200**.

Natural Gas Combustion
The combustion of natural gas, like the combustion of most fuels, produces substances on the state's list of substances known to cause cancer or reproductive harm.

For more natural gas safety tips, visit **socalgas.com**. If you would like further information, please write to: Environmental Services, Southern California Gas Company, 555 West Fifth St., Mail Code: GT17E3, Los Angeles, CA 90013-1011

Southern California Gas Company
A Sempra Energy utility®

N1340104 13-1310 0913

Isn't cancer a long term health effect? Isn't reproductive harm a long term health effect? Did DPH supercede the law? It is counterintuitive for DPH to make a statement when we have admission through Proposition 65.

Apparently, Public Health relied solely on the misleading and incomplete information supplied by SoCalGas and ignored Prop 65 warnings; sidestepping DPH's responsibility of proper due diligence to protect the community.

Specifically this misinformation led DPH to prematurely accept that the community symptology was caused by mercaptan and methane alone. During the blowout it was discovered that the chemical composition was far more complex and included, "molecules of concern" one being a known carcinogen called benzene. However benzene was then falsely dismissed on the basis that the measured air levels were below EPA standards and normal. DPH's position had not changed and was shared in a letter by the **Office of Environmental Health and Hazard (OEHHA).**

The OEHHA letter to the community dated May 22, 2018 is in **Exhibit B** and sets forth the following in *blue italics* (emphasis added)*:*

*"**Emissions related to reported symptoms***

Prior to the February 2016 sealing of the leaking well, the Los Angeles County Department of Public Health received a substantial number of reports from Porter Ranch residents, whose homes were located downwind from the Aliso Canyon natural gas storage facility. The residents described recurring symptoms such as headaches, nausea, abdominal discomfort, dizziness and respiratory irritation.

***These odors** can evoke symptomatology such as nausea and headaches at levels much lower than those that would cause **other health** effects such as irritation to the eyes or the respiratory system. The symptoms reported by many Porter Ranch residents were consistent with **low-level exposure to the two odorants.**"*

The above creates the question of whether the proper due diligence was done by our regulators to protect the public's health.

The Health Probe

As a treating physician with over 30 years' experience in primary care, urgent care and emergency medicine, I have personally interfaced with thousands of patients throughout my professional career.

At the time of the blowout, I was the medical director of Porter Ranch Quality Care, an urgent care and family practice, sitting less than 3 miles from the blowout well and in the middle of the disaster. A flood of patients presented with a **combination** of complaints which I had not seen in my history as a physician. This inspired me to look deeper as a clinician.

The probe included evaluating patients' histories, performing physical examinations, evaluating labs and ancillary testing including EKG's, Pulmonary Function Testing, and X-Rays. At the time I also thought it was odd that no other public agency physician had completed.

Billions of chemical reactions occur every minute within the human body. Toxins are chemicals which when internalized can alter normal metabolic pathways causing malfunction or death to cells within a biological

organism. These alterations in normal cellular function can present as symptoms within a human or pet.

Phase 1

Phase 1 Clinical	
Patients (min 2 symptoms)	52
Females	31
Males	21
Age Distribution	11-80
Age Concentration	40-60

Phase 1 – Health Problems

- Cough (greater than 4 weeks) 79%
- Headache 77%
- Nose Bleed 34%
- Dizziness 28%
- Nausea/Vomiting/Diarrhea 23%
- Eye Irritation 13%
- Rash 12%

Phase 1 - Other Symptoms

- Tingling of hands and mouth
- Feeling unfocused
- Forgetfulness
- Dry mouth
- Laryngitis or change of voice
- Chest congestion
- Muscle and Joint pain
- Body pain

In January 2017, One Year Later…
Health problems still persist as shown in Phase 2 of the health probe.

Phase 2 Clinical	
Patients (new)	72
Females	51
Males	21
Age Distribution	13-91

Phase 2 – Health Problems (January 2017)

- Headache 60% (compared to Phase 1 – 77%)
- Fatigue 55% (compared to Phase 1 – no data)
- Cough 51% (compared to Phase 1 – 79%)
- Nausea, vomiting, diarrhea 42% (compared to Phase 1 – 23%)
- Nosebleeds 31% (compared to Phase 1 – 34%)

Phase 2 - Other Symptoms

- Rash
- Laryngitis, sore throat, sinus symptoms
- Memory loss
- Depression
- Hair loss
- Body pain
- Palpitations
- Vertigo
- Insomnia

So should anyone believe
that all of the above symptoms
can be caused
<u>just</u> from methane and mercaptans?

NO.

Phase 3 was initiated in April of 2017, and involved specialized testing for elements and heavy metals through hair analysis and urine testing for VOCs (Volatile Organic Compounds). This phase expanded to 106 patients as follows:

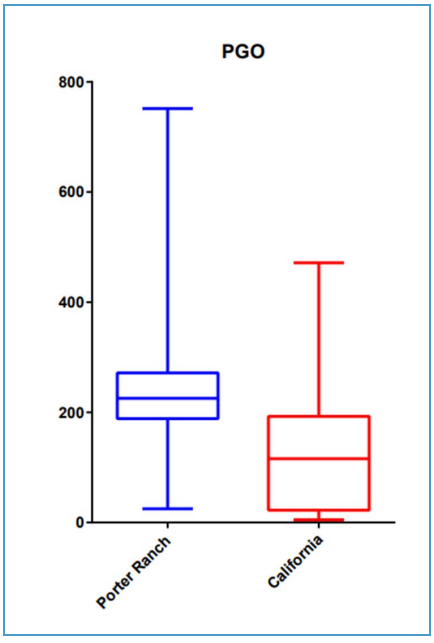
VOC Urine Testing

Phase 3 VOC/Urine Testing	
Patients Tested	106
Females	70
Males	36
Age Distribution	3-79

So What Was Found in the Urine Tests?

Evidence of the metabolism of Styrene & Ethylbenzene, used in oil and gas, – Phenylglyoxylic Acid ("PGO")

- Metabolite of Styrene and Ethylbenzene = PGO
- Local PGO levels are much higher than the rest of California
- P Value = .0005
  - The lower the P Value the greater the difference between test and control groups
  - <0.05 demonstrates a statistical significance
- Demonstrating the PGO levels in Porter Ranch residents tested were statistically significantly different than other California residence

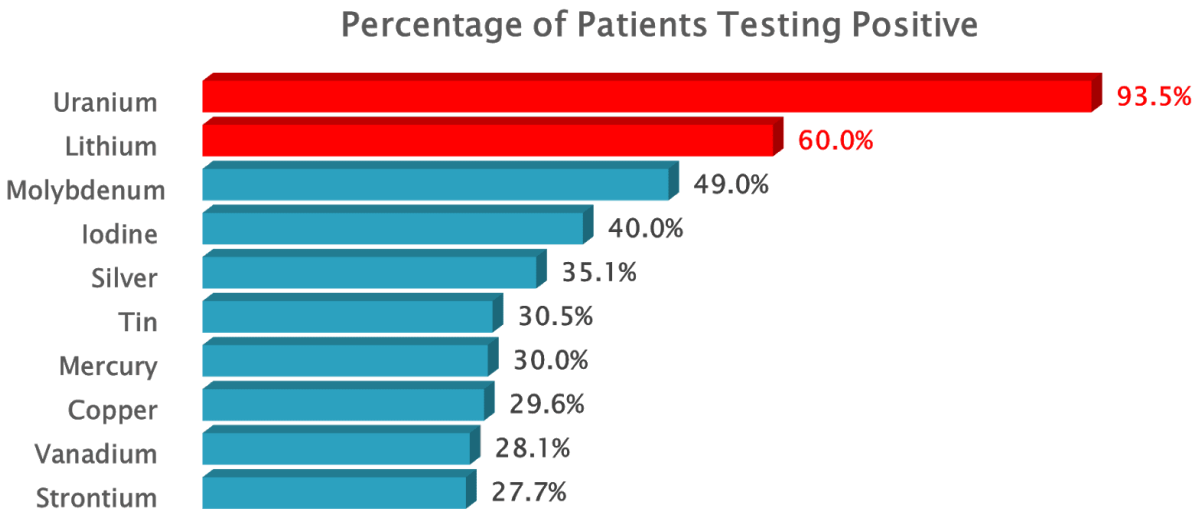


Heavy Metals Hair Testing

Phase 3 Hair/Metal Testing	
Patients Tested	103
Females	62
Males	41
Age Distribution	3-80

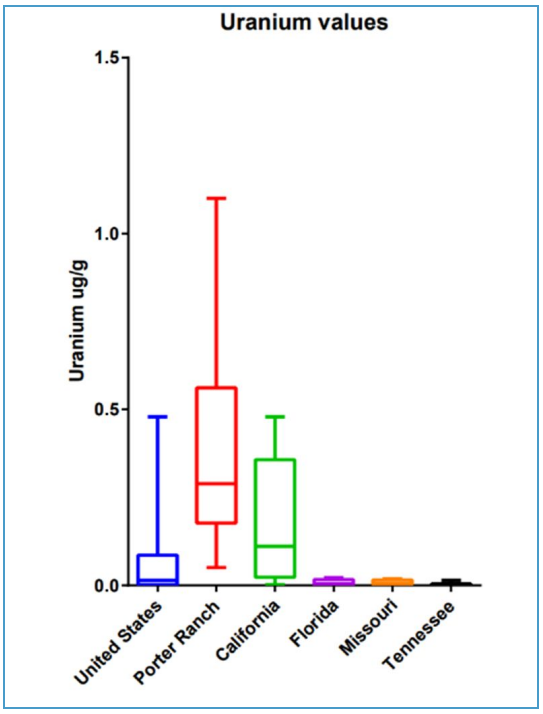
The findings of the hair/metal testing found the following among the impacted area residents:

Hair Analysis Screening – Top 10



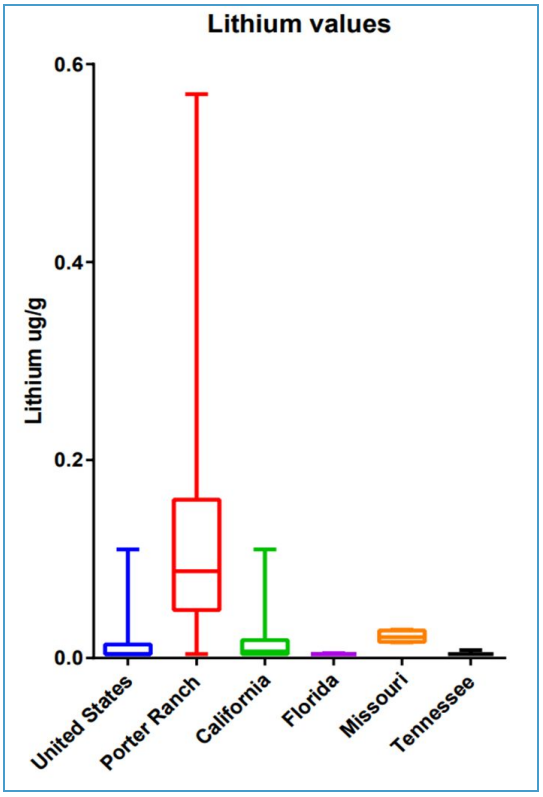
Uranium Values

- Local Uranium Levels are significantly greater than control
- P-Value Uranium = 0.009
    - The lower the P Value the greater the difference between test and control groups
    - <0.05 demonstrates a statistical significance



Lithium Values

- Local Lithium values are significantly higher relative to control
- P Value Lithium = 0.0004
    - The lower the P Value the greater the difference between test and control groups
    - <0.05 demonstrates a statistical significance



LADWP

The hair toxicology testing for lithium within the community of Porter Ranch was significantly higher than control groups. Upon these findings further investigation showed that there was lithium within the LADWP water supply. Controls were run against six independent water districts that had no common source between them and were all found as non-detectable for lithium.

Water Samples Values

25 LADWP Households Tested		
Area	**N-samples**	**Lithium**
Porter Ranch	6	54-88
Chatsworth	3	49-88
Granada Hills	5	55-78
Lake Balboa	1	78
Los Angeles	3	57-75
Venice Beach	1	74
Northridge	1	73
Encino	2	54-68
Tarzana	1	65
Woodland Hills	1	65
Winnetka	1	59
Average		**65.4**
Median		**65**

6 Non-LADWP Households Tested		
Area	**N-samples**	**Lithium**
Camarillo	1	ND
Oak Park	1	ND
Santa Clarita	1	ND
Simi Valley	1	ND
South Pasadena	1	ND
Westlake Village	1	ND
Average		**ND**
Median		**ND**

ND=Non-Detectible

LADWP was notified and they took the high road. The LADWP ran their own sample testing and revealed the results at a recent Porter Ranch neighborhood Council meeting. **DWP confirmed that our readings were accurate!** This speaks volumes to the validity of the hair sampling. We have followed up and have patients that have moved from the area ingesting only non-lithium tainted water and repeated their hair samples and found that they were negative.

What are the positives that came from a properly looking and finding?

- LADWP has now implemented continual testing
- Hopefully, LADWP will not stop there but evaluate these levels of lithium in the water and their health effects on those that consume it

LADWP Report to the Public 2018 - (Exhibit C)

TABLE III Calendar Year 2018 Water Quality Monitoring Results

Unregulated Drinking Water Substances Detected in Treated Water

Substances	Major Sources in Drinking Water	Units	Los Angeles Aqueduct Filtration Plant		Northern Combined Wells		Southern Combined Wells		MWD Weymouth Plant		MWD Diemer Plant		MWD Jensen Plant	
			Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range
Alkalinity, Total (as $CaCO_3$)	Erosion of natural deposits	mg/L	97	86 - 112	117	90 - 131	117	107 - 139	112	107 - 117	106	99 - 114	72	68 - 76
Ammonia + Chloramines (as N)	Drinking water disinfectant added for treatment	mg/L	0.5	0.4 - 0.5	0.5	0.3 - 0.6	0.5	0.4 - 0.6	NA	NA	NA	NA	NA	NA
Bicarbonate Alkalinity (as $CaCO_3$)	Naturally-occurring dissolved gas; erosion of natural deposits	mg/L	119	105 - 137	143	110 - 159	143	131 - 169	NA	NA	NA	NA	NA	NA
Boron NL = 1000	Erosion of natural deposits	µg/L	408	321 - 513	270	145 - 304	270	203 - 304	130	130	130	130	140	140
Bromide	Runoff / leaching from natural deposits; seawater influence	µg/L	45	22 - 89	79	47 - 90	79	72 – 97	NA	NA	NA	NA	NA	NA
Calcium	Erosion of natural deposits; natural hot springs	mg/L	24	21 - 26	43	28 - 48	43	38 - 57	63	57 - 69	58	52- 65	20	19 - 21
Chromium, Hexavalent	Industrial discharge; erosion of natural deposits	µg/L	<0.1	<0.1	0.4	<0.1 – 0.6	0.4	0.3– 0.7	<1	<1	<1	<1	<1	<1
Hardness, Total (as $CaCO_3$)	Erosion of natural deposits	mg/L	88	72 - 97	159	111 - 175	159	145 - 204	254	233 - 274	240	219 - 262	89	84 - 94
Lithium	Erosion of natural deposits	µg/L	84	39 - 118	41	10 - 67	41	27 - 51	NA	NA	NA	NA	NA	NA
Magnesium	Erosion of natural deposits	mg/L	7	5 - 9	12	10 - 14	12	12 - 14	24	23 - 26	23	21 - 25	9.7	9.5 - 9.9
Phosphate (as PO_4)	Erosion of natural deposits, agricultural run-off	µg/L	38	<31 – 83	70	52 – 89	70	58 – 89	NA	NA	NA	NA	NA	NA
Potassium	Erosion of natural deposits	mg/L	4	4	4	3 - 4	4	3 - 4	4.7	4.4 - 5.0	4.4	4.0 - 4.8	2.4	2.4 - 2.5
Silica (as SiO_2)	Erosion of natural deposits	mg/L	16	15 – 18	17	15 - 18	17	16 - 19	NA	NA	NA	NA	NA	NA
Sodium	Erosion of natural deposits	mg/L	37	29 - 42	40	28 - 44	40	28 - 47	98	94 - 103	92	86 - 98	46	45 - 46
Temperature	Natural seasonal fluctuation	°C	20	18 - 26	22	15 - 32	22	15 - 32	NA	NA	NA	NA	NA	NA
Total Coliform	Naturally present in the environment	NUM/ 100mL	<1	<1 - 1	<1	<1 – 2	<1	<1 – 1	NA	NA	NA	NA	NA	NA
Vanadium NL = 50	Erosion of natural deposits	µg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3

2018 Drinking Water Quality Report | 15

In the midst of my health probe, it was announced to the community that these results would be disclosed based on the philosophy of complete transparency. And then I was...

Terminated!!
Wait...What?

Seven weeks prior to the town hall I was blindsided by being told I was terminated by the Southern California Orthopedic Institute. I was replaced as Medical Director. However, I was not to be deterred and the Town Hall proceeded forward despite this alleged unlawful termination.

The findings were given to the community at a Town Hall presentation on October 14, 2017, click here for a link to the presentation.

So What were the Known Chemicals?

The specific **known** toxins that the community was exposed to from the blowout, many of which were identified in a letter from OEHHA May 22, 2018 and is found in Exhibit B:

- Methane
- Mercaptan
- Hydrogen Sulfide
- Volatile Organic Compounds: benzene, toluene, ethylbenzene, Xylenes (aka: BTEX)
- Radon
- Formaldehyde
- Glutaraldehyde
- Acrolein
- Silica
- Heavy metals (Barium, zinc, copper, cadmium, arsenic, nickel, and vanadium. Smaller amounts of other metals such as molybdenum and chromium were also detected.
- Particulate Matter (PM) with 187 Hazardous Air Pollutants
- **Most importantly, toxic crude oil!**

Imagine taking a shower for weeks in toxic crude oil with its numerous toxin combinations while inhaling natural gas with its toxic constituents combined with particulate matter made from hazardous air pollutants (HAP)!

Then there's all the heavy metals which can cause anything from cardiac arrhythmias to small fiber neuropathy. These can lead to palpitations, vertigo, and body pain.

There is no literature examining this unique combination of toxins that the San Fernando Valley was exposed to. Most literature only documents single toxin exposure. So what can we refer to for health hazard risks? **Nothing.**

What About The Unknown Chemicals?

The actual list of chemicals which were released is still ***unknown*** because there are federal laws which insulate the gas and oil industry from full disclosure. This comes from our federal politicians. This is shocking to me as a treating physician when ***childrens' health*** is at stake. This clearly demonstrates the lack of compassion, concern, morals and ethics some of ***our politicians*** have!

In further public testimony from the department of public health, Dr. Rangan explained: The Southern California gas company **did not** release the names of the specific chemicals that were released into the community. **On that factual basis alone the Department of Public Health should never have made any health hazard evaluation!** In fact, DPH should have stated clearly that they do not know the health hazards because of this basic fact! Yet they relied on the information from the gas company that only methane and mercaptans were released into the community and were responsible for the communities symptoms!

But was this true. As you can see OEHHA identified the well-kill materials as known early as December 2015

Table 3: Maximum Concentrations of Selected Metals in Well-Control Waste Fluids (mg/L) (SoCalGas, December 2015)	
Barium	11.0
Zinc	0.23
Copper	0.22
Nickel	0.21
Antimony	< 0.17
Cadmium	0.11
Arsenic	0.10
Vanadium	0.10
Molybdenum	0.075
Cobalt	0.016
Chromium	0.013
Lead	0.006
Mercury	0.0002

Table 2: Substances Used in the SS-25 Well-Control Operations *			
Product	**Total Pounds Used**	**Primary Chemical or Substance**	**Secondary Chemicals and Impurities**
Barite	122,000	Barium sulfate (80-84%)	Crystalline silica (10-12%); Mica/Illite (< 6%) Calcite (calcium carbonate; <2%)
Calcium chloride	80,098	Calcium chloride (28-40%)	Water, NA (†)
PolyTek+	37,000	NA (a water-based mud product)	Crystalline silica (<= 9%); Mica/Illite (< 2%) Titanium oxide (Rutile) (<0.5%) Acetic acid (<0.02%); Ethylene oxide (<0.002%)
Potassium chloride	11,978	Potassium chloride (18-24%)	Water (76-82%)
DiaSeal-M	6,250	Diatomaceous earth (80%)	Calcium hydroxide (8%); Cellulose (5-15%) Crystalline silica (<1%)
Nut Shells	3,870	Cellulose (99-100%)	Crystalline silica (0.5-1.5%)
Bentonite (GEO GEL)*	3,000	Montmorillonite clay (>80%)	Water (8-12%); Crystalline silica (0-7%) Feldspar; Calcite
Geo Zan	2,575	Clarified xanthan polymer	Xanthan gum (>=99%) Glyoxal (<1%)
DrisPac SL	2,240	Sodium carboxymethylcellulose (95-99%)	Calcium stearate (1-5%)
Caustic Soda	1,270	Sodium hydroxide (>98%)	NA
Amber Guard	600	Glutaraldehyde (15%)	Water (85%)
Desco	200	Methyl ester of sulfonated tannin (40-55%)	Ferrous sulfate (5-9%) Crystalline silica (0.1-0.4%)
Saw Dust	60	Wood dust (84-89%)	None reported
Water Based Mud (WBM)	See above	Barite (10-30%) Bentonite (10-30%)	Crystalline silica (1-6%) Sodium chloride (5-10%) Sodium hydroxide (1%); Water

* Based primarily on product information reported in data sheet AC_PUC_0130169 (See Attachment 1, below) and additional Safety Data Sheets (SDSs) provided by SoCalGas. GEO GEL is listed as "Gel" in Attachment 1.

(†) NA: Not available based on the information contained in the SDS.

Is this the epitome of negligence and quite possibly the intentional withholding of information?

As a treating emergency room physician, let me give you an example as follows:

A patient would present after ingesting two handfuls of pills. One handful would have a combination of different **known** medications at **unknown** dosage. There is no literature guiding me as how they would react with one another or to treatment. The other handful had a combination of **unknown** medications at **unknown dosages.**

Then the patient asks the questions: **Is this safe? Will this have long-term health effects on me?**

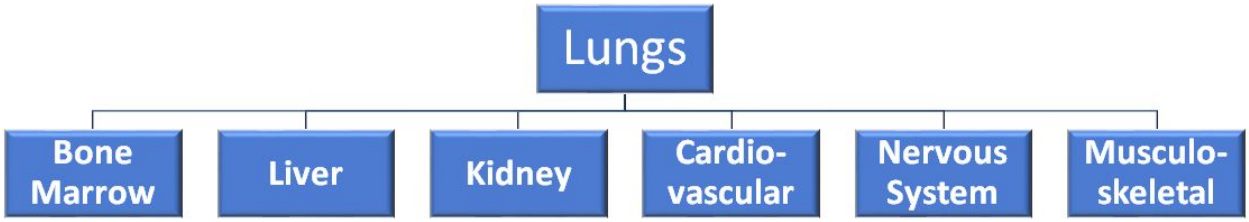
Based on the abundant **lack** of information, how can anyone with a **science mind** answer this question? ***They cannot!***

When evaluating the above facts on the Aliso Canyon blowout, how can any definitive statement be made regarding short term or long term health effects? The only scientific responsible position that public health regulators can or should take is "**we CANNOT assure the community it is safe**".

As a clinician, I am quite concerned about one organ system that could have been irreparably damaged that being...

The Respiratory Tract

This organ system can affect numerous other organ systems within the body.



Medically it is very important to consider that chemicals which are inhaled can very efficiently get into the bloodstream more so than taken orally because there are no enzymes to degrade the toxin.

Let's look at all of the **known** chemicals the community was/is being exposed to which would potentially cause **respiratory symptoms:**

- Methane
- Mercaptan
- Hydrogen Sulfide
- Benzene, Toluene, Ethylbenzene, Xylene, any VOC
- Formaldehyde
- Glutaraldehyde
- Acrolein
- Silica
- Particulate Matter (potentially 187 hazardous air pollutants)
- Toxic Crude Oil (a carrier of heavy metals)

All of the above can cause damage to the respiratory tract. However, I would like to focus on a few in particular.

Hydrogen Sulfide

It is a sulfide and smells very similar to the odorant mercaptan. In fact, how can one distinguish from the other? **One cannot!**

Symptoms of inhalation are dependent upon the parts per million and can cause various respiratory symptoms that range from rhinitis to acute respiratory failure. Other symptoms include, possible fatigue, loss of appetite, headache, irritability, poor memory, dizziness. Hydrogen Sulfide may also affect multiple organs, causing temporary or permanent derangements in the nervous, cardiovascular, renal, hepatic, and hematological systems.

Silica

Silica is a known chemical used in the gas and oil industry and was acknowledged by OEHHA (Exhibit W) as a chemical used in the 7 well kill attempts to resolve the blowout of well SS-25.

Was This Community Exposed To Silica?

YES.

What Are The Health Effects Of Silica Inhalation?

According to the US Occupational Safety and Health Administration (OSHA), silica has many serious health warnings (link to OSHA) as follows:

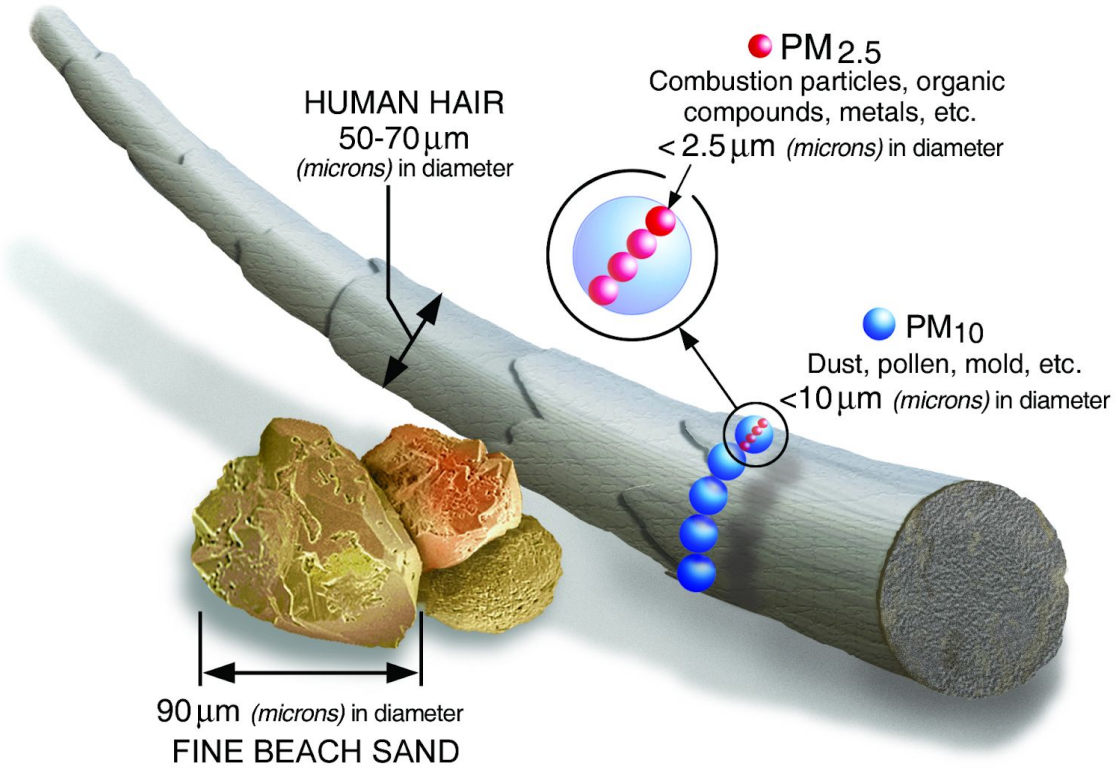
> *"Breathing in very small ("respirable") crystalline silica particles, causes multiple diseases, including silicosis, an incurable lung disease that leads to disability and death. Respirable crystalline silica also causes lung cancer, chronic obstructive pulmonary disease (COPD), and kidney disease. Exposure to respirable crystalline silica is related to the development of autoimmune disorders and cardiovascular impairment. These occupational diseases are life-altering and debilitating disorders that annually affect thousands of workers across the United States."*

What is Particulate Matter and its Health Effects?

USEPA defines it as a mixture of solid particles and liquid droplets found in the air. It is made from **hazardous air pollutants** (HAP's). Sizes are described as:

- **PM10**: inhalable particles, with diameters that are generally 10 micrometers and smaller; and
- **PM2.5**: fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller
- **UFP:** (Ultrafine Particles)

How small is 2.5 micrometers? Think about a single hair from your head. The average human hair is about 70 micrometers in diameter – making it 30 times larger than the largest fine particle.



Toxic, or hazardous air pollutants cause or are suspected of causing cancer, birth defects, or other serious harms. They can be gases, such as hydrogen chloride, **benzene** or toluene, dioxin, or compounds such as asbestos, or elements such as cadmium, mercury, and chromium. The U.S. Environmental Protection Agency has classified **187** pollutants as hazardous and could potentially contribute to:

- Cancer, including lung, kidney, bone, stomach
- Harm to the nervous system and brain
- Birth defects
- Irritation to the eyes, nose and throat
- Coughing and wheezing
- Impaired lung function
- Harm to the cardiovascular system
- Reduced fertility

A Quick Review of the World Literature Shows

UFPs were significantly associated with incident wheezing among Danish infants (Andersen et al., 2008a), current asthma among Korean schoolchildren (Kim et al., 2011), objective lung findings (spirometry and eNO) in studies from Italy and the United States (Buonanno et al., 2013; Newcomb et al., 2012), asthma-related ED visits in Finland (Halonen et al., 2008), and certain respiratory outpatient visits in Chile.

The UCLA Letter Dated March 19, 2016 *(Exhibit F)*

> *"There are no regulatory standards for Ultra Fine Particles, hereinafter ("UFP"), although there are numerous studies in the literature suggesting they may have unique toxicity based on their small size and ability to* ***translocate to organs*** *outside of the lungs, as well as epidemiological studies indicating that exposure to fresh combustion emissions (of which UFP are both a major component and a tracer) results in elevated incidence of many adverse health outcomes"*

No Regulatory Standards Despite the Following:

- https://www.ncbi.nlm.nih.gov/pubmed/15204759
- https://www.google.com/search?q=(Franck,+et+al.,+2011;+Oberdo%CC%88rster,+2000;+Valavanidis,+et+al.,+2008).&client=safari&rls=en&tbm=isch&tbo=u&source=univ&sa=X&ved=2ahUKEwiAguSp19reAhVgFjQIHYqyDMwQsAR6BAgGEAE&biw=1240&bih=674#imgrc=H4ZPzKtLHovkiM:
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4714792/
- https://oehha.ca.gov/air/press-release/press-release-air/study-finds-long-term-exposure-ultrafine-particle-air-pollution
- https://oehha.ca.gov/media/downloads/air/press-release-air/ultrafinespress022515.pdf
- https://ehp.niehs.nih.gov/doi/10.1289/ehp.1408565
- https://cfpub.epa.gov/ncer_abstracts/index.cfm/fuseaction/display.highlight/abstract/220

Toxic Crude Oil

Crude oil is a highly toxic mixture of carcinogens, neurotoxins, respiratory irritants, hepatotoxins, nephrotoxins, and mutagens. Its toxic effects can be both acute and chronic resulting in a number of immediate symptoms and significant long-term effects including reproductive problems and cancer. **Exposure to crude oil can be through the air as a result of volatilization of some of its components, through direct contact by dermal penetration, and orally through the ingestion of contaminated food.**

One of the more insidious components of crude oil is **benzene**.

Did The Regulators Account For This Avenue Of Benzene Exposure? NO

Some of the immediate symptoms resulting from exposure to crude oil include **difficulty breathing**, **nausea**, **headaches**, **dizziness** in relatively healthy people, but those with conditions such as COPD, allergies, and asthma would be affected even more and their health problems significantly exacerbated. Health effects presenting at a later time could result in **long-term damage** to the respiratory, immune, nervous, and reproductive systems and may even result in birth defects and cancers. **Endocrine disruption**, DNA damage, damage to the developing fetus, **blood disorders,** and mutations have all been shown to result from exposure to the components of **crude oil.**

Why is this important?

There is a small respirator mask known as a **P100**, with an average cost of $2.40. **Why was this community not advised by its public health department of this preventative treatment?**

NIOSH Standard

NIOSH 42 CFR 84
Particle Filter Classifications

Minimum Efficiency	N-Series	R-Series	P-Series
95%	N95	R95	P95
99%	N99	R99	P99
99.97%	N100	R100	P100

N-Series: Not for oil

- ✔ *Approved for all particulate contaminates but not for oil mist*
- ✔ *Use until increased breathing resistance or damaged*

R-Series: Resistant to oil

- ✔ *Approved for all particulate contaminates including oil mist*
- ✔ *Time restriction of 8 hours when oils are present*

P-Series: Oil Proof

- ✔ *Approved for all particulate contaminates including oil mist*
- ✔ *Manufacturer's time use restrictions apply*

What About The Combination Of All Of The Above?

Where in the scientific literature is this unique combination of known toxins documented despite the unknown toxins? Where in their communications to the public did the Department of Public Health account for any of the combinations of all of the above?

This Certainly Provokes Many Extended Questions!

What about the children with asthma or the elderly patient with chronic obstructive pulmonary disease? Could this exacerbate their underlying disease process? **YES.**

With all of the chemicals that affected the respiratory tract and can potentially translocate to other organ systems, what **long-term health effects** will this community be left with?

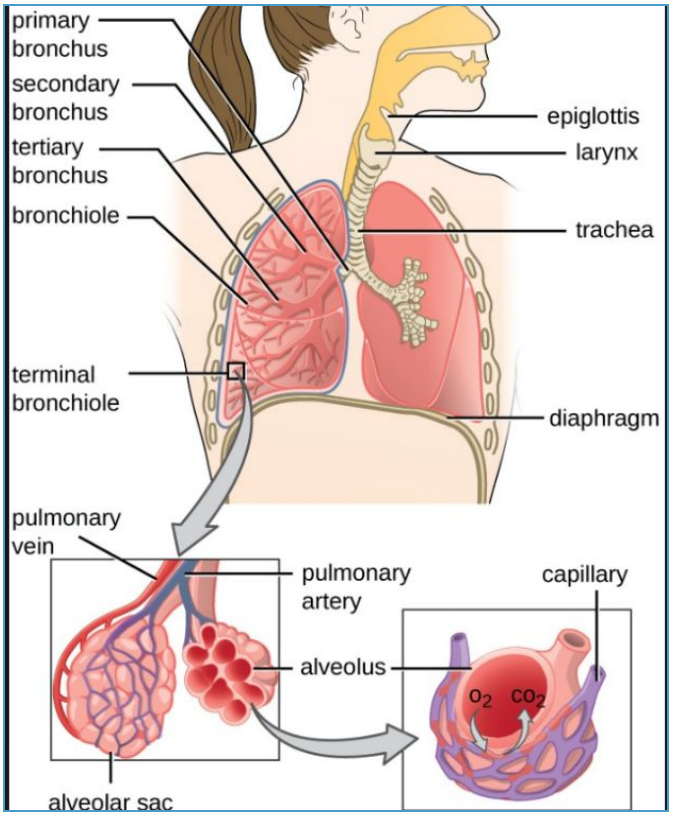
This leads me to…The Aliso Cough

There have been numerous patients in the community who have complained of a prolonged chronic cough and have been searching for an underlying answer for years.

Respiratory complaints were found to be a significant complaint involving this organ system that the community experienced both during and after the Aliso Canyon blowout. So I went back and researched all the potential toxins that could cause respiratory effects. We have now seen them above.

Let me lay a scientific foundation. This is how the respiratory tract works.

The upper away consists of the nasal cavity, mouth, larynx, trachea, and bronchus. The lower respiratory tract includes the bronchi and alveoli.
The respiratory tract attempt to maintain a steady environment of normal physiological chemicals and gases for its optimal functioning. A cough is a normal physiological mechanism to maintain this steady environment by clearing the airway. A cough can be created anywhere along the respiratory tract and a cough is a signal that something is present in the respiratory tract that **should not be**.



Both infections and chemicals can damage the respiratory tract and lead to pneumonia or pneumonitis (inflammation of the pulmonary tree). Please note that chemical damage to the lung can lead to infections of the lung. In other words, pneumonitis can lead to pneumonia.

I recently found out that the DPH has a **Syndromic Surveillance System** that allows electronic access into emergency rooms visits for collection of data. The full report is available in ***Exhibit D*****,** and below are some excerpts in *blue italics* (emphasis added):

DPH to the community Feb. 19, 2016

> *"Results from the Syndromic Surveillance system analysis showed that there was no substantial increase in the total number of non-gastrointestinal visits to EDs serving Porter Ranch and adjacent communities. Results from visits occurring since October 23, 2015, were compared with results from visits occurring prior to October 23 (i.e., prior to the gas leak). Additionally,* ***no increases*** *in non-gastrointestinal symptoms was observed between* ***those EDs serving Porter Ranch and adjacent communities compared to EDs serving the rest of LA County.*** *While an increase in gastrointestinal symptoms was observed in EDs serving Porter Ranch and adjacent communities, similar increases also occurred at EDs serving the rest of LA County. Of note, the observed increase in gastrointestinal symptoms across the county reflects a pattern of gastrointestinal illness that has been observed previously (i.e., a pattern in which these illnesses begin to rise in early November and peak) in mid-December and other times of the year."*

So in essence they did not find an increase in respiratory tract (non-gastrointestinal) visits to the local ED's.

Really…?

This is in Contradiction to Our Local Veterans Administration Health Care Outpatient Services!

The full report published in Cambridge University Press is available here, but the highlights are below in *blue italics* (emphasis added).

June 2019

Methods: *A retrospective cohort study was conducted using US Department of Veterans Affairs (VA) administrative and clinical data. On the basis of zip codes, we created two groups: PR (1920 patients) and San Fernando Valley (SFV) (15 260 patients) and examined the proportion of outpatient visits to VA providers with respiratory-related diagnoses between October 2014 and September 2017.*

Results: *We observed an increase in the proportion of visits in the PR group during the leak (7.0% vs 6.1%, P<0.005) and immediately after the leak (7.7% vs 5.3%, P<0.0001). For both groups, we observed a decrease in respiratory diagnoses one year after the leak (7.0% to 5.9%, P < 0.05 PR; 6.1% to 5.7%, P < 0.01 SFV).*

Conclusion: *Exposure to natural gas likely led to the observed increase in respiratory-related diagnoses during and after the PR gas leak. Early relocation following natural gas leaks may mitigate respiratory exacerbations.*

The Latest Study
Tells It All

An article published in Science Direct, in **June 2019**, by Diane Gonzales, PhD is available here and in ***Exhibit E***

Let's take a look at its highlights in *blue italics* below (emphasis added):

> ***"For the first weeks of the event, elevated levels of hazardous air pollutants (HAPs), mercaptans (natural gas odorants including tert-butyl mercaptan and tetrahydrothiophene), and hydrogen sulfide were measured in ambient air, and a visible "oily" residue was reported at multiple locations across the Porter Ranch community (Walton, 2016; SoCal SoCalGas, n.d; AQMD, n.d.; Wilcox, 2015)"***
>
> *"...61% experienced headaches or migraines; 40% experienced nausea, vomiting, stomachaches, Gastrointestinal (GI) issues, or diarrhea; 32% experienced bloody noses; and **27% experienced respiratory/breathing symptoms** (LADPH, 2016a)."*
>
> *"A subsequent Public Health Assessment conducted in 114 indoor environments adjacent to the storage facility revealed several air toxins that were **found above** the United States Environmental Protection Agency's (**U.S. EPA**) health-based standards and a characteristic "fingerprint" of metals that provided biologically plausible explanations for health symptoms noted by area residents (LADPH, 2016c). **Furthermore, they found the metal cluster - consisting of barium, manganese, vanadium, and aluminum…"***

Points to note:

- If toxins are greater than *USEPA* they are certainly greater than calEPA! **Is this deception again?!**
- Metals are carried on/in Particulate Matter and by Crude Oil!
- Mercaptan and Methane will not account for *all* the symptoms!
- Heavy metal exposure will not account for *all* the symptoms!

Dr Gonzales' article went on with many other key points in *blue italics*, my comments are in **bold** below each as follows:

> *"The complex topography of the Aliso Canyon hillside **distributes particles and other air toxins unequally** through the neighborhoods and the diversity of architectural elements influences air exchange rates into **indoor environments where, on average, Americans spend >90%** of their time (Klepeis et al., 2001)."*

The above helps to explain why some have and some do not have symptoms.

> *"While **mean** concentrations were under health-based benchmarks, **HAP concentrations from individual 5-min canister samples exceeded the 8-h and chronic RELs set by OEHHA**"*

Conversely, DPH often defaulted to using only the mean in their health assessments. Is looking SOLELY at the mean scientifically accurate?

> *"Results from SCAQMD canister samples revealed that during the 24-hour sampling time frame, **several HAP compounds were highly influenced by emissions from well SS25** including n-hexane, **styrene**, toluene, and **benzene**."*

Consistent with phase III of my health probe, we discovered presence of PGO (as derived in the body from styrene exposure) in community patients' VOC tox screening were of statistically significant greater levels.

> *"While encouraging, it is important to note that ambient BTEX concentrations, **below health benchmarks**, have been associated with adverse health outcomes in **numerous epidemiological studies**, and the WHO has declared **no safe threshold for benzene inhalation**."*

Agreed.

> *"Furthermore, evidence suggests that a broad range of HAPs co-emitted during peak CH4 emissions may **increase** original **estimates of health risks** of exposure if those **co-emitted compounds are biologically additive or synergistic**."*

Correct!

"Thus, it is important to emphasize that both particle concentrations and the chemical composition affect toxicity, and thus, ***without a speciated analysis of the measured particles, it is difficult to interpret the potential human health impacts from their exposure****."*

No one performed a chemical analysis on the Particulate Matter!

Also per the article:

"...complex emissions associated with natural gas storage and current methodological shortcomings may have failed to properly characterize exposure risks for several reasons.

First*, without knowledge of the full range of toxins emitted during the active blowout, researchers may not have sampled or analyzed all potentially biologically relevant pollutants.*

Second*, single pollutant health-based standards are unable to provide risk estimates from concurrent or close-succession exposures from a* ***wide range of pollutants*** *common in oil and natural gas development and storage.*

Third*, current health benchmarks do not adequately address possible risks associated with chronic, lower levels of exposures, particularly when multiple air pollutants might be implicated.*

Fourth*, several pollutants found in ambient air during the active blowout, such as benzene, are associated with cancer endpoints that, even at low atmospheric concentrations, generally do not have a threshold below which there is a safe level of exposure.*

Fifth*, the failure to holistically assess impacts from multiple potential exposures (e.g. economic, social, health, etc.) may have led to inadequate risk characterization, especially among those most affected by the psychological stress of the blowout event."*

Dr. Gonzales concludes the article as follows:

> *"...empirical evidence suggests two key conclusions:*
>
> *(1) that hazardous air pollutants, known to cause cancer and other serious health impacts, were emitted from the blowout or equipment associated with the attempt to stop releases from well SS25; and*
>
> *(2) these gaseous and particle chemicals reached proximate communities and likely affected indoor living environments.*
>
> *Thus, the principal finding of this investigation is that accidents at natural gas storage facilities have the potential to release harmful pollutants into proximate community settings and indoor environments where people spend large proportions of their time.* ***As such, these findings warrant further investigation into long-term environmental and health exposure studies of the surrounding communities."***

Once again, the purpose of this document is to disclose all information I have so that you would know everything that I know.

During this 4 year investigation, I have uncovered some very disturbing information which has compelled me to create this document and expose the captive government regulators.

A Pattern and Practice of:

Don't Look, Don't Find, Don't Tell…Then Cover-Up

Our public agencies had both a legal and ethical fiduciary responsibility to perform the proper due diligence to evaluate this disaster and formulate an opinion of the present and long term health hazards. This must be clearly communicated to the exposed community so that they are informed. Why? So a family can decide whether to continue living in the exposed community. These public agencies should be accountable to the people.

As demonstrated in DPH's published mission statement:

Our Mission

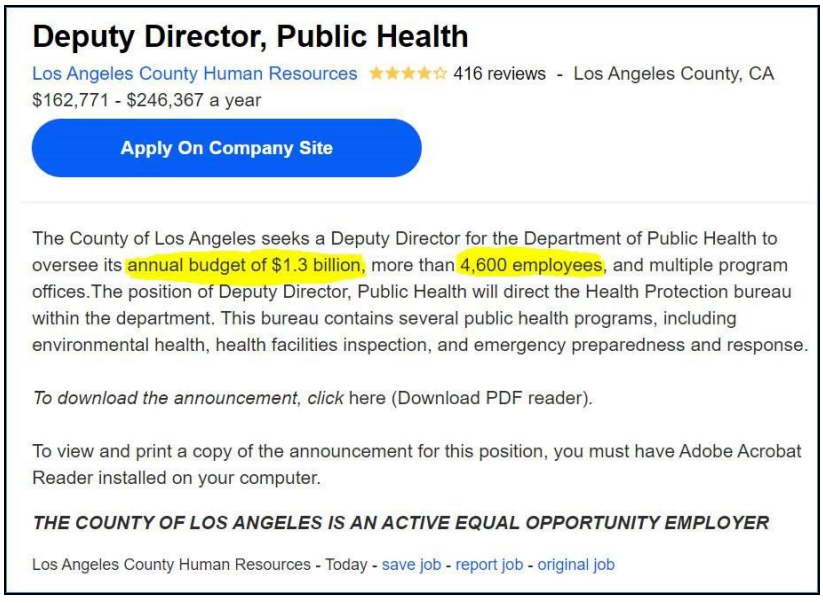
The Environmental Health Division strives to promote health and quality of life by identifying, preventing, and controlling harmful environmental factors in Los Angeles County.

The mission of Environmental Health is to assess environmental conditions and reduce exposure to health risks, and to educate the public on sources of environmental risk so they are empowered to protect themselves, their families, and their communities.

Souce: http://publichealth.lacounty.gov/eh/

So What Did The Regulators Do For The Aliso Canyon Disaster?

Before we consider their actions, in fairness, one should consider if the resources are available to perform such due diligence. In a recent (September 2019) LinkedIn.com job posting by DPH, the agency noted its considerable resources in an effort to attract top talent. With $1.3 billion in annual budget and 4,600 staff; surely this organization should be able to allocate resources to properly address the largest methane and chemical disaster in US. history. **But did they?**



Deputy Director, Public Health

Los Angeles County Human Resources ★★★★☆ 416 reviews - Los Angeles County, CA
$162,771 - $246,367 a year

Apply On Company Site

The County of Los Angeles seeks a Deputy Director for the Department of Public Health to oversee its annual budget of $1.3 billion, more than 4,600 employees, and multiple program offices.The position of Deputy Director, Public Health will direct the Health Protection bureau within the department. This bureau contains several public health programs, including environmental health, health facilities inspection, and emergency preparedness and response.

To download the announcement, click here (Download PDF reader).

To view and print a copy of the announcement for this position, you must have Adobe Acrobat Reader installed on your computer.

THE COUNTY OF LOS ANGELES IS AN ACTIVE EQUAL OPPORTUNITY EMPLOYER

Los Angeles County Human Resources - Today - save job - report job - original job

Leighton Study

UCLA Finds Evidence of Benzene but DPH Failed to do any Testing of Dust Wipe to Detect Benzene in the Communities Homes

A small team from UCLA Environmental Health were on scene investigating air and dust samples in and around nearby unoccupied homes. Their findings became critical to understanding the health risks the community was exposed to.

UCLA found "chemicals of concern" in the dust wipe samples in 2 of the 7 homes tested and issued a letter dated March 19, 2016 in response to these findings. Below in *blue italics* are excerpts from that letter, the full letter appears in ***Exhibit F.***

UCLA letter to the community March 19, 2016

> *"These elements can find their way into homes so, dust samples were taken in 7 unoccupied homes in Porter Ranch – March 10th, 2016"*
>
> "Preliminary results…detected **benzene** and **hexane** in the dust in two of the homes tested."

Based on these UCLA researchers' findings, UCLA was compelled to advise LA County Department of Public Health (LACDPH), US EPA and SoCalGas. The UCLA team also advised on the protocol for future indoor testing directed at the LACDPH with the message:

> *"These findings suggest the need for additional indoor testing."*

LACDPH Initiates a Study of Area Homes

Fully informed and equipped with the information from UCLA's findings of **Benzene** and **Hexane** in the wipes from counter tops in 28.6% or 2 of the 7 homes tested, LACDPH initiated a study known as the Leighton Study, click here for a link to the study. The Leighton Study surveyed 114 homes and 6 schools. The indoor environmental sampling activities were

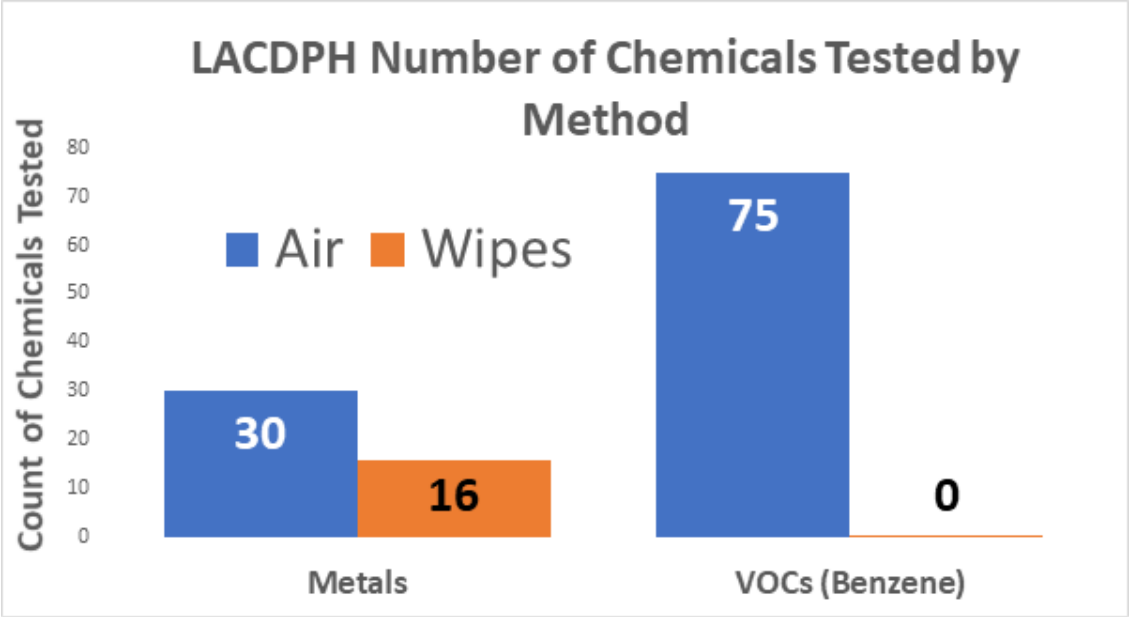
conducted during the months of March and April, 2016. Of the 114 homes, 103 were TEST homes which were unoccupied, non-smoking homes within 3 miles of the well blowout. Another 11 homes 6 miles SE of the blowout were established as controls.

The Leighton Study published results on May 13, 2016. Once I reviewed all 4,700 pages it was clear to me that this was an expensive report and I wondered where the funding came from.

According to the report, the primary in-home test consisted of two methodologies, air canister grabs and surface wipes. The air casters are vacuums and when a valve is opened, ambient air is sucked into the canister. After the valves are closed, the canisters are labeled and used for later analysis. The wipes were done to various hard, non-porous surfaces like granite counter tops, sealed in a clean plastic bag, labeled and also sent off for analysis.

However, despite the knowledge that UCLA found benzene in the dust wipes, LACDPH **did not** conduct VOC (including benzene) tests of the wipes in their Leighton Study. Even though the Leighton Study found benzene and other harmful toxins in the air of the test homes, dust samples **were not tested** for the known carcinogen and clearly identified a “chemical of concern” by UCLA researchers. In informal conversations with LACDPH, it was explained to residents that they believed the chemical to be volatile and there is no need to test for it within dust. But what if, like in UCLA’s testing it was there? Why didn’t LACDPH do the right thing and test for it? Is this good science?

Further puzzling is the Leighton Study looked for several **VOCs**, 75 to be exact, in the air but **ZERO** in the wipe testing.



Benzene!

Benzene is a very harmful and toxic chemical and the World Health Organization's position is that there is no safe level of exposure. Despite this, the USEPA/CalEPA feels they have far better knowledge and have documented threshold levels of toxicity. Below is the Office of Environmental Health Hazard Assessment (OEHHA) Acute, 8-hour and Chronic Reference Exposure Level (REL in µg/m^3) Summary.

Benzene (71-43-2)	**A**	27		Developmental; Immune system; Hematologic system	M
	8	3		Hematologic system	H
	C	3		Hematologic system	H

A=Acute Exposure
8=8-hour Exposure (work day)
C=Chronic Exposure

M=Mice
H=Humans

Please note that the **acute** level was studied only on mice.

The number in the table above represents a concentration in units of micrograms per cubic meter (µg/m^3). Therefore your reference of an 8 hour exposure of 3 micrograms per cubic meter of air (µg/m^3), which equals 1 ppb, or greater is toxic and can affect a humans bone marrow.

Benzene was found by LACDPH during air sample testing and at high risk levels within the area homes studied.

A CONTROL home had a level of 5.8 µg/m^3, **nearly 2 times greater** than what the OEHHA considers safe for chronic exposure of 3 µg/m^3. While a TEST home had a level of 29 µg/m^3, that's **nearly 10 times greater** than what the OEHHA considers safe for chronic exposure.

Below are the actual documented test results taken from the Leighton study.

Actual CONTROL Home Test Results

Table 4a: Air Samples, Volatile Organic Compounds (VOCs)

Analytical Method: EPA TO-15; Units: micrograms per cubic meter (µg/m^3)

Results file number	P1601737	P1601691	P1601737	P1601830	P1601830	P1601740
Location	Control	Control	Control	Control	Control	Control
Date Sampled	4/1/2016	3/30/2016	4/1/2016	4/5/2016	4/5/2016	4/1/2016
Acrolein	**7.8**	< 3.8	**4.1 J**	**2.7**	**3.6 J**	**2 J**
Acrylonitrile	< 0.93	< 0.96	< 1.1	< 0.62	< 1.1	< 1
alpha-Pinene	**1.7**	< 0.96	**9.7**	**8.5**	**7.5**	**2.2**
Benzene	**2.2**	**0.67**	**1.5**	**1.2**	**1.5**	**5.8**
Benzyl Chloride	< 0.93	< 0.96	< 1.1	< 0.62	< 1.1	< 1

Actual TEST Home Results

Table 4a: Air Samples, Volatile Organic Compounds (VOCs)

Analytical Method: EPA TO-15; Units: micrograms per cubic meter (µg/m^3)

Results file number	P1601830	P1601738	P1601668	P1601690	P1601738	P1601691
Location	Residence	Residence	Residence	Residence	Residence	Residence
Date Sampled	4/5/2016	4/1/2016	3/29/2016	3/30/2016	4/1/2016	3/30/2016
Acrolein	**2.7 J**	**1.2 J**	< 2.9	**1.2 J**	**2 J**	< 4.4
Acrylonitrile	< 1.6	< 0.63	< 0.73	< 0.71	< 0.86	< 1.1
alpha-Pinene	**1.2 J**	**6.5**	< 0.73	**0.7 J**	**10**	< 1.1
Benzene	**2.2**	**0.49**	**0.25**	**1.1**	**29**	**0.29**
Benzyl Chloride	< 1.6	< 0.63	< 0.73	< 0.71	< 0.86	< 1.1

However, LACDPH's Report to Homeowners ignored these findings in the Leighton study to make the following statement on May 31, 2016 (emphasis added). The full letter appears in ***Exhibit G***.

DPH to the community May 31, 2016

> ***…"As described in the summary report, the majority of the priority chemicals of concern, including benzene, polycyclic aromatic hydrocarbons (commonly known as black soot), and sulfur compounds, were not found to be elevated in the air or dust in Porter Ranch area homes."…***

This is deception! There was **NO** dust wipe testing in the homes for Benzene! Now who would not want to know if there was Benzene on your countertops, the same countertops that your **children eat from**?!
Also, as you have seen there were elevated levels of benzene in the air canisters.

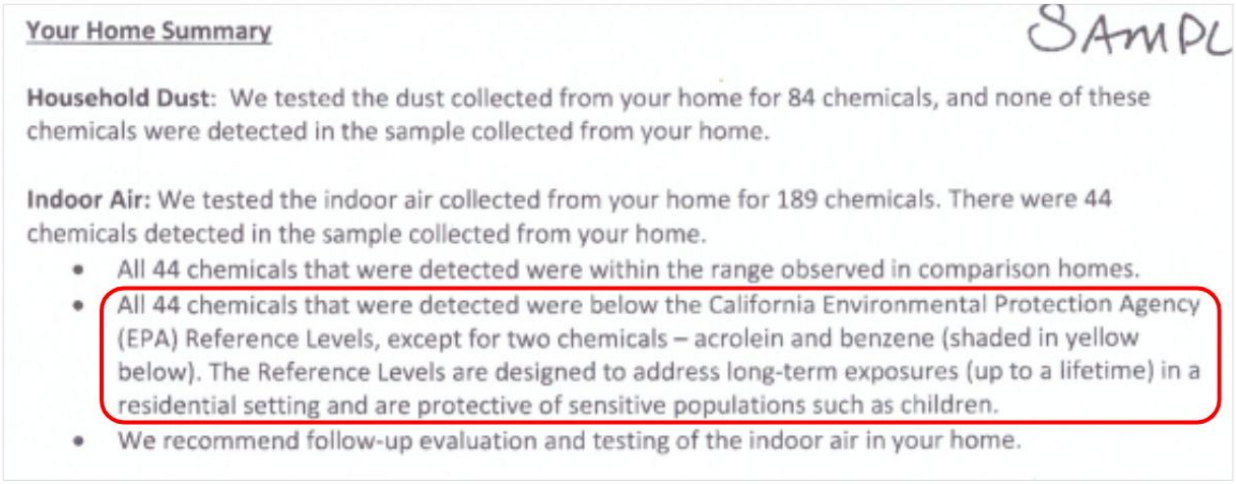
Acrolein

Another chemical of concern that was found in abundance is **Acrolein**. The Leighton Study discovered the following:

- **96% of 103 Test homes were positive for Acrolein,** with levels greater than 0.35 or above the CalEPA level
- **100% of 11 Control homes** had Acrolein levels greater than 0.35
- **83% of Schools tested (5 of 6)** had Acrolein levels greater than 0.35

Acrolein is derived from propene and is a byproduct of oil refining and natural gas processing. It is also released from tobacco. However, the homes tested in the Leighton Study were vacant due to relocation and non-smoking. Acrolein is toxic and is a strong irritant for the skin, eyes, and nasal passages. Acrolein is associated with an increased risk of lung cancer and hemorrhagic cystitis causing blood in urine.

One home testing positive received this notice from DPH regarding the chemicals found in air samples.



Your Home Summary

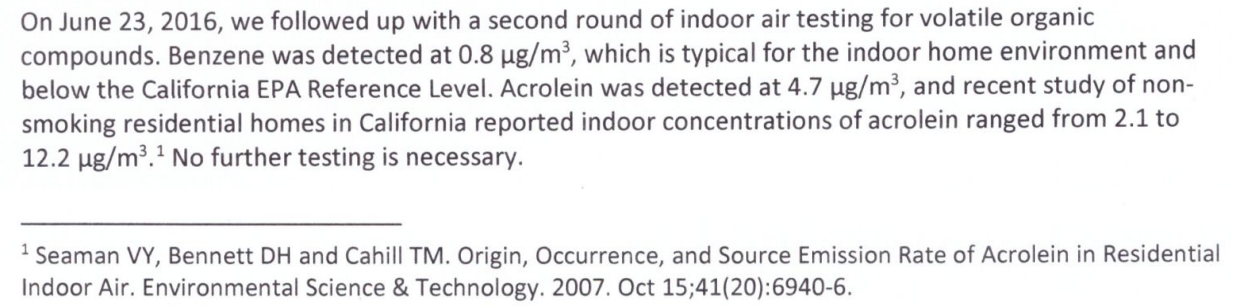
SAMPL

Household Dust: We tested the dust collected from your home for 84 chemicals, and none of these chemicals were detected in the sample collected from your home.

Indoor Air: We tested the indoor air collected from your home for 189 chemicals. There were 44 chemicals detected in the sample collected from your home.

- All 44 chemicals that were detected were within the range observed in comparison homes.
- All 44 chemicals that were detected were below the California Environmental Protection Agency (EPA) Reference Levels, except for two chemicals – acrolein and benzene (shaded in yellow below). The Reference Levels are designed to address long-term exposures (up to a lifetime) in a residential setting and are protective of sensitive populations such as children.
- We recommend follow-up evaluation and testing of the indoor air in your home.

Despite these widespread, positive findings of Acrolein, DPH referenced this unrelated study and made the following statement to justify the higher than acceptable CalEPA levels. Falsely advising no further testing was necessary. Below is a scan of the actual note provided.



On June 23, 2016, we followed up with a second round of indoor air testing for volatile organic compounds. Benzene was detected at 0.8 µg/m^3, which is typical for the indoor home environment and below the California EPA Reference Level. Acrolein was detected at 4.7 µg/m^3, and recent study of non-smoking residential homes in California reported indoor concentrations of acrolein ranged from 2.1 to 12.2 µg/m^3.[1] No further testing is necessary.

[1] Seaman VY, Bennett DH and Cahill TM. Origin, Occurrence, and Source Emission Rate of Acrolein in Residential Indoor Air. Environmental Science & Technology. 2007. Oct 15;41(20):6940-6.

Points to Note:

The community homes had **significantly greater levels of Acrolein than calEPA acceptable levels**, however DPH **deceptively** decided to use an article that is not applicable to the environmental situation in an attempt to justify the positive findings.

As the article states, if acrolein, which is a volatile organic compound was **released from the active heating of cooking oils, then how could it have been created in non-occupied homes?**

The Holleigh Bernson Park

There are more, **Don't Look...Don't Find** actions. In early March, 2016, DPH received numerous community complaints of brown, oily spots in and around nearby Holleigh Bernson Memorial Park. DPH investigators visited the park on two occasions and eventually discovered brown spots on facility surfaces including the park perimeter fence, signs, **playground equipment**, restroom doors and walls, and **drinking fountain**. The full report is in ***Exhibit H***.

DPH **invites** SoCalGas to be onsite to investigate the chemical make-up of the oily spots. Surprisingly, DPH relinquished control of the sample gathering and testing to a **lab (Geosyntec) selected by and under the control of SoCalGas**. DPH does NOT take its own samples or seek an analysis from an independent lab such as Leighton who was conducting research of nearby homes at the time.

Don't Look...Don't Find as follows. DPH turning over the chemical sampling and testing to the perpetrator SoCalGas, is similar to a small town sheriff asking Bonnie and Clyde to provide their own fingerprint experts to examine the scene of a recent bank robbery, after several eyewitnesses saw them running from the bank carrying large gunny sacks at the time of the bank robbery. The absurdity of this is having the dimwitted sheriff accepting the conclusion of their fingerprint expert as "*not detected*". Astonishing.

It's not difficult to speculate these oily spots were the same as those identified and reported by numerous residents in the area of the same material they found on their cars, patio furniture and homes back in December 2015. Further evidence is that during the first week of January, 2016, screens and plexiglass sheets were erected on the community side of the blowout orifice, to help capture the oily mist spewing out of the uncontrolled release well for 16 weeks. Yet DPH claims it was a mystery to them that the community was showered with crude oil, and therefore, DPH didn't advise the community of such dangers.

These are not the judgements or actions of an agency that should be in charge of health hazard assessment of the public's health.

What is the Infamous Wind Study?

The "Wind Study" was initiated by the Department of Public Health to examine further potential toxins within the area that were in question. Keep in mind this study took place during the time the facility was not pressurized (no injections or extractions) a very important point!

So a proposal was drafted by GIS HEAL (Geographic Information Systems Health Exposure Analysis Lab) on July 22, 2016. The full document is found in ***Exhibit I.***

GIS HEAL documented the following in their proposal (emphasis added).

> *"Preliminary measurements suggest that the SS-25 leak contributed to very small particles in the Porter Ranch ambient environment. Further, there is some evidence that a source in the area is on-going."*
>
> *There are four lines of evidence:*
>
> *(1) the observed oily residue;*
> *(2) results from scanning electron microscopy;*
> *(3) data collected with SNAQ monitors; and*
> *(4) data collected with the DiSCmini monitors.*
>
> *The oily residues observed on residences in the area, and chemical analyses of these residues found organics and metals consistent with the SS-25 gas leak and attempts were made to stop it. Deposition of viscous liquid and solid material is indicative of an aerosol rather than a gas phase delivery mechanism and is thus a strong indication of a significant particle phase component to emissions.*
>
> *Additionally, there were occasional events with much larger particles appearing in multiple size bins. Most of the small particle events were observed when winds were arriving from the North, in the direction of the well field and associated operations. Of note, the three monitors registering episodic elevated particle concentrations were located in the same areas where most of the health complaints originated.*
>
> *These episodic particle events lasted 15-40 minutes, occurring when the wind came from the North/North East/North West, in the mid to late evening. This finding by itself is not conclusive but merits further*

investigation as it suggests an ongoing source of ultrafine in the community. The potential for other sources is corroborated by indications that methane levels continue to be elevated above background at several locations in the community."

Key points to note:

- The cost - $89,270, was this paid through tax-payer dollars?
- Documentation of oily residue with heavy metals
- **These were found in the same areas where most of the health complaints originated**
- Methane levels continue to be elevated above background at several locations in the community

The Wind Study

Title page:

Prepared by GIS HEAL Labs for Los Angeles County Department of Public Health

The full report is available in *Exhibit J*. Below are specific points to note:

- Report was completed by November 2016, but sequestered by DPH for nearly 2 years
- Released to the public October 30, 2018, the same date as the letter from the Porter Ranch Neighborhood council to the CPUC in regard to crude oil noted above, a *coincidence*?
- As you can see it was prepared for "Los Angeles County Department of Public Health"!

So What Was All The Covert Behavior For?

The *Wind Study* report went on with many other key points captured in *blue italics* (emphasis added), and my comments are in **bold** below each as follows:

> *"This work was motivated by air quality monitoring results collected both during and after the blowout. Specifically, the motivation came from air monitors deployed during the blowout by University of California at Los Angeles (UCLA) researchers, Argos Scientific (a non-governmental organization), and Southern California Air Quality Monitoring District (SCAQMD)/ California Air Resource Board (CARB)."*

All private and government agencies were involved.

> *"These monitors showed transient **elevations** in concentrations of air toxics including **benzene, airborne particles**, and methane when winds were arriving from the north, which was the direction of Well SS-25 and associated operations."*

The community has already been told that benzene was below toxic levels.

> *"During the time when the facility was not **withdrawing** or **injecting natural gas** and after Well SS-25 was permanently plugged with cement, air monitoring results also indicated **similar elevated** concentrations when winds were blowing from the north.*
>
> *Concerns were compounded by reports of suspected residual off-gassing from the ground and into the atmosphere; as well as the presence of buried and plugged or abandoned oil wells in and around the Porter Ranch community (data available at www.conservation.ca.gov/dog). The concerns from **these wells** were that they produced uncharacterized **fugitive emissions** which may impact the community and, thus, **merited further investigation**."*

Points to note:

- Giving off fugitive emissions may negatively impact the community!
- Was further investigation performed?

The report went on to say:

> *"Results from Summa Canisters trigger samples collected between March 4, 2016 and November 14, 2016 by SCAQMD were presented to expand on the pre-injection monitoring of VOCs. In general, most reported contaminants were below levels of health concern. In total, there were 21 of 40 samples that detected benzene; of these, the average benzene level was 2.2 ppb, which is above typical ambient background levels in Los Angeles. On only one occasion did the concentration exceed the reference level (REL) of 8 parts per billion (ppb), when a benzene concentration of 13 ppb was detected in July 2016. In nearly all cases, samples were triggered in the hours between 6:00 and 9:00 am or near midnight."*

Points to note: The canisters which collected air samples within the community are triggered by the presence of either by Volatile Organic Compounds (VOC) or Methane. Total VOCs have to reach 30 ppm and Methane has to reach 5 ppm in order to trigger the canister's.

The canisters collected air for 24hrs and then were sent to the lab for analysis.

Normal background levels of methane should be 2.2 ppm and below. 2.2 ppm and above is consistent with fugitive emissions. This begs the question of why the Methane trigger point was set at 5 ppm! 2.2 ppm is the threshold, not 5 ppm!

It is obvious, **Don't look, Don't Find.**

Table below are the results of air samples taken. Points to Notes:

Table 5: Summa Canister trigger samples of selected VOCs

Location	Date	Time	Methane (ppmv)	Benzene (ppbv)
	Acute RELs (ppb):		NA	8
Castlebay	3/4/16	7:07	4	3.8
Castlebay	3/15/16	10:33	4	0.2
Highlands	3/17/16	7:10	2	0.2
Highlands	3/18/16	6:28	3	0.4
Castlebay	3/18/16	6:32	3	0.3
Castlebay	4/2/16	7:55	3	0.2
Highlands	4/7/16	7:11	NA	NA
Castlebay	4/7/16	8:24	3	0.3
Highlands	4/7/16	7:13	2	0.6
Highlands	6/17/16	7:40	NA	NA
Highlands	6/17/16	7:46	2	1.2
Highlands	6/19/16	22:23	3	<0.1
Highlands	6/23/16	9:50	NA	NA
Highlands	6/23/16	9:50	NA	NA
Highlands	7/1/16	7:02	3	NA
Highlands	7/10/16	22:00	NA	NA
Highlands	7/15/16	7:18	3	0.7
Highlands	7/29/16	6:42	4	13
Highlands	8/16/16	6:33	3	<0.1
Highlands	8/19/16	7:14	3	<0.1
Highlands	8/19/16	7:15	3	NA
Highlands	8/19/16	7:11	3	0.7
Highlands	8/26/16	7:25	3	0.3
Highlands	9/2/16	6:34	NA	NA
Highlands	9/11/16	8:23	NA	NA
Highlands	9/23/16	6:50	3	1.9
Highlands	9/23/16	6:49	NA	NA
Highlands	9/26/16	**	NA	NA
Highlands	9/27/16	13:35	2	0.1
Highlands	9/30/16	6:15	2	7.5
Highlands	9/30/16	6:59	3	7.1
Highlands	9/30/16	6:15	NA	NA

* Chronic REL in place of acute REL
** Illegible handwriting
§ Data were transcribed from scanned paper reports. Each of the sampling events did not necessarily measure for all compounds. Compounds reported in Table 5 represent VOCs most likely to be characteristic of oil and gas activities. "NA" represents not measured, "<0.1" represents measured concentrations below detection or quantification limits. Original data can be found at [http://www.aqmd.gov/home/news-events/community-investigations/aliso-canyon-update/air-sampling/air-montoring-activities/grab-sample-data]

- As stated in the table to the left, 21 of 40 samples detected benzene
- 19 N/As highlighted in yellow were not tested! Why?
- It was not that they did not detect, they did not run an analysis (see footnote)
- The community has already been told that **benzene** was below toxic levels but now we see **average level of 2.2 ppb**
- This is above calEPA!
- They should not have documented averages this is very misleading to the public. Cal EPA limits are not documented in averages!
- "On only one occasion did the concentration exceed the REL of 8 ppb". This is the **one** hour exposure! What about 1 ppb an 8 hour exposure.
- **This is bad science and incredibly deceptive.**

Points to Note:

- No association between methane and benzene! And any level above 1 ppb has adverse health according to calEPA
- So how can we rely on air measurements of methane and predict levels of benzene and hence safety? You cannot!

Furthermore, the "World Health Organization" makes clear there is no safe level for Benzene.

Now I see why the Wind Study was sequestered!

DON'T TELL

As stated in DPH mission statement, their responsibility is to communicate to the community and health care providers. Let's review how they met this obligation when it came to the worst methane and toxin exposure in US history.

Communications to Health Providers

Dr. Guzenhauser, Medical Director for the Los Angeles County Department of Public Health sent a letter to area Healthcare Providers on January 22, 2016. The full letter is in *Exhibit K*, and below are some interesting highlights in *blue italics* (emphasis added).

> ***"To: This message is intended for primary care, urgent care, internal medicine, and emergency medicine provider.***
> ***Subject: Fact Sheet for Medical Providers"***
>
> ***"Are there any relevant medical tests that should be ordered?***
>
> *There are no recommended toxicological tests of blood, urine, or other tissues for the clinical evaluation of patients exposed to the gas leak. While laboratory tests do exist for monitoring compounds such as benzene in petroleum industry workers, these tests are used* ***only for the purpose of biomonitoring, and not for clinical evaluation."***

Why Should We Not Implement Biomonitoring? It Applies Perfectly!

Toxicology tests of the blood and urine is not used solely for petroleum industrial workers but rather is available to any exposed individual. These tests certainly could confirm exposure well beyond that of cigarette smoke and or filling up your tank at the gas station.

"Are There Any Specific Diagnostic Considerations And Medical Treatments?

Patients should be evaluated clinically for symptoms of mercaptan exposure. There is a wide variation in symptoms in different individuals exposed to mercaptans. For example, in the same household one family member may smell no odors, one may smell odors but have no or minimal symptoms, and another may experience severe symptoms. Children and adults who are otherwise healthy should receive symptomatic treatment. Patients with mild tolerable symptoms can remain in their homes. The only treatment for persistent or unbearable symptoms is removal from the odor. Patients with intolerable symptoms should be encouraged to take advantage of temporary relocation assistance offered by the gas company."

Mercaptan, a sulfur-based compound, is the molecule of least concern in January of 2016. This is supported by the fact that the community was being showered upon by toxic crude oil, the toxins of particulate matter and all of the toxins within natural gas. ***Was this addressed? No.***

The letter goes on to state:

"Are there any special considerations for patients with chronic disease?

Patients who have been exposed to the natural gas leak may present with exacerbations of chronic conditions or worsening of medication side effects which may, or may not, be associated with the exposure. Exposure to the gas leak may present a diagnostic dilemma for medical providers. For example, patients with asthma may experience an increased need to use rescue inhalers. This could be due to exposure to the gas leak or due to another etiology. These patients may benefit the most from temporary relocation in order to properly diagnose changes in their chronic conditions. To discuss specific patient concerns, please contact Dr. Cyrus Rangan at the telephone number below."

Why Is This Important?

It is important to note that according to the DPH and the AQMD, the only molecules causing health effects were Mercaptan and Methane! This was despite evidence that crude oil droplets were reported and confirmed as early as by December 17, 2015, six-weeks into the blowout!

The next communication with the community was from the Los Angeles County Department of Public Health on March 8, 2016. Full document is in ***Exhibit L***, below are highlights in *blue italics* (emphasis added).

DPH - Dr. Rangan to Healthcare Providers March 8, 2016

> *"This message is intended for primary care, urgent care, internal medicine, and emergency medicine providers.*
>
> *Actions **Requested** of Providers*
>
> *When evaluating patients presenting with mild headaches, gastrointestinal or respiratory symptoms, or those with other non-specific complaints:*
>
> - *Look for **alternate etiologies other than air contamination.***
> - *Avoid performing **any toxicological tests**; these are not recommended and are unlikely to provide useful data for clinical evaluation of patients.*
> - *If no alternative etiology is found and there is concern regarding either ongoing- or past environmental exposures, consult Dr. Cyrus Rangan, Director of the Bureau of Toxicology and Environmental Assessment at 213-738-3220."*

Why is this Important?!

Medical Damages

Whether intentional or not, DPH's directives have potential legal liability stemming from instructing health care providers to “look for alternative etiologies other than air contamination.” Etiology simply means causes.

Interfering in the physician/patient relationship is extremely troublesome because the physician could follow these directives and not document a potential association between the patient's symptoms and air contamination. This is critical because without documentation by the treating physician, the plaintiff’s ***expert physician*** will not be able to testify favorably on the patients’ behalf and the patient will not recover his or her potential medical damages!

Thus the abhorrent consequences of DPH’s request is two fold at a minimum. First, is the unlawful obstruction and interference with the physician/ patient relationship. Second, is the unequivocal message to steer treating physicians away from entertaining symptomatology caused by the gas leak! These directives are in violation of and fall well below the standard of care for any practicing physician.

Points to note:

- Public Health had changed their verbiage from “**recommendations**” to **“**actions **requested** of providers**”** a more demanding tone!
- **Nonspecific symptoms** are in essence all of the symptoms people were complaining of and reported in DPH’s CASPER study from the exposure!
- All of these symptoms are exactly what I had found in the initial clinical evaluation in January 2016.
- “alternative etiologies” means look for different causes other than **air contamination**, the gas blowout!
- This letter interferes with the medical providers medical decision-making placing them at risk for medical malpractice
- Review the recommendations in light of the findings in the CASPER Study

These practices went beyond letters from Dr. Guzenhauser and Dr. Rangan but rather throughout the **entire LACDPH!** In fact, one day at the clinic, a registered nurse who worked for the Los Angeles Department of Public Health presented requesting a face-to-face conversation with the medical staff at Porter Ranch Quality Care. She worked for the Los Angeles County Department of Public Health. We sat down and she attempted to convince me that patients symptomatology was not caused by the gas leak. I politely disagreed, and explained it was inappropriate for a nurse to attempt to guide care by a physician to a patient. The meeting was short.

Los Angeles City Firefighters

Is No One Immune From the Public Regulators Deception Not Even Our First Responders?

In the beginning of May 2018, I was contacted by a small group of firefighters wishing to question me in regards to the symptoms patients' were having within the community. The firefighters were stationed at local fire stations within the Porter Ranch community. I agreed to speak with them and we met at a local fire station. There were three other stations that were involved with firefighters complaining of symptoms. So, I took a survey and analyzed. Their symptomatology paralleled that of patient's complaints within the community. They agreed to become a special cohort within the "medical surveillance study". This study is ongoing.

Please note:

- At a face-to-face meeting with regulators the firefighters were misled by as well stating there were no health concerns!
- Firefighters sought legal counsel and a lawsuit was filed on their behalf on Jan 29, 2019.

A Lawsuit was filed on behalf of these 1st responders on January 29, 2019. The full filing can be found in ***Exhibit M***. Several of the troubling pleadings are below in *blue italics*.

The Pleadings Speak for Themselves!

- *Neither DPH nor SoCalGas recommended any similar relocation for the firefighters, nor did they recommend any other safety measures.*
- *The emissions from the gas leak and resulting health problems impact the first responders and firefighters who stayed to care for anyone left behind during the holidays. Firefighters are already vulnerable in their work duties, and when possible, firefighters are given notice of the chemical exposures so that they can wear proper protective gear. Near Aliso canyon, the firefighters had no protection as described below, the firefighters became ill from this exposure before, during and after the holidays.*
- *The LAFD preserves life and property, promotes public safety and fosters economic growth through the prevention of disasters and protection of our community.*
- *There are several fire stations in close proximity to the residents of Porter Ranch and the Los Angeles community adjacent to the Santa Susanna mountains.*
- *In the hours, days and months following the SS-25 blowout, LAFD firefighters remained in their stations to protect the residence and employees left behind.*
- *Instead of providing the purifiers, in late January, SoCal Gas partnered with the Los Angeles County Department of Public Health to meet the firefighters at Station 28 and provide false reassurances.*
- *DPH was represented by Cyrus Rangan on February 2, 2016 and February 4, 2016 and Catherine Butler on February 3, 2016. These two DPH employees joined with SoCalGas to tell the LAFD the results from the air monitoring by SoCalGas.*
- *Firefighters told the DPH of their health problems which ranged from rashes, headaches, and dizziness to bloody noses.*
- *The presenters assured the firefighters of the safety of the gas and its constituents: it is "perfectly safe," "no hazards," and "natural gas is not toxic." DPH told the firefighters that odorants caused the short*

term irritation to people who are sensitive to odors, but there was no evidence of odorants in the community. DPH specifically assured the firefighters that there were "no long-term health effects." These representations were made to dozens of firefighters (from Station 28 and nearby stations who came to hear the DPH presentation).

- *The presenters told the firefighters there was "no hazard because the exposure is no different than when you experience when pumping gas in your car." Sound familiar?*
- *Both So Cal Gas employees watched with approval and were not in support of the representations by DPH to the firefighters.*
- *DPH never asked about the illnesses faced by the firefighters.*
- *So Cal Gas assurances made directly to and through the DPH were knowingly false and made with a reckless disregard for the truth.*

What about the children?

LAUSD

There are 18 schools within a 5-mile radius of the Aliso Canyon gas blowout/exposure. The two closest schools, within 2 miles, are:

(1.) Castlebay Lane Charter, for grades kindergarten through fifth grade, which educates 770 children; and

(2.) and Porter Ranch Community School, for grades kindergarten through eighth grade, which educates 1,100 children.

Throughout the exposed time frame, from October 2015 until February 2016, it was the regulators position including Southern California Gas that the chemicals causing symptomatology were methane and mercaptans (an odorant). As we have seen, this was not factual and there were many more chemicals with more toxic profiles.

Children are more susceptible than adults for a few scientific reasons. First, they have a smaller body mass and all drugs including toxins are

dosed upon an amount per bodyweight. If the same dose is being given to a child as that of an adult the child has a higher risk of becoming toxic from that particular chemical. Second, children have a higher basal metabolic rate and for those toxins that are dependent upon metabolism to create a toxic metabolite they again would be at greater risk for organ damage. Was this ever considered by the health regulators or the school supervisors?

LAUSD "Notice of Exemption" Jan 8, 2016

(see Exhibit N)

There is clear evidence that the children **were exposed while at school and then became ill.** This was tracked through increased and more frequent health visits to the nurses office, absenteeism, request for Home Independent Study programs, and transfer requests. Finally, two schools were actually relocated in January 2016!

Public health mandated that Southern California Gas company finance air purifiers for the classrooms at all schools within 5 miles of the blowout. These air purifiers were placed in classrooms when the children were sitting and at rest and in numerous cases were not used at all. Yet there was no recommendation to minimize physical activity and the children were mandated as usual to participate in cardiovascular exercises! Was this healthy for the children!?

Where was the Department of Public Health that has as their lead physician a documented Board-Certified Pediatrician/ Medical Toxicologist?

Were the schools and the parents of these children notified of **all** of the other chemicals including crude oil and particulate matter that they were being exposed to? **NO!**

More importantly, where was the guidance given by DPH to the community's school administration to curtail the children's outdoor activity in order to aid in the minimization of toxin exposure? After all Dr. Rangan is a Pediatrician!

How Did The "Wind Study" Finally Become Public?

Wind Study Oct. 30, 2018 (Exhibit I)

This report was completed two years prior to the October 30, 2018 date and yet was never released to the public despite numerous requests until the date above. It was **sequestered** by the Los Angeles County Department of Public Health for two years. ***NO information was shown to the community! Why?***

The "wind report" was requested through a formal legal process known as a "Public Records Act Request". This was done by plaintiff counsel on August 15, 2018 **without a response**.

In addition, I filed a Public Records Act Request, dated **October 22, 2018 *(Exhibit O).***

I received a phone call approximately 4 days later from **Fabiola Chavez** from the Los Angeles County Department of Public Health stating the report was **not available** because it was **not complete**. I questioned her with regard to the fact that the report has been completed for over two years. She had no response. I asked her to have the Department of Public Health's general counsel contact me, yet no such effort to communicate with me was ever made.

The report was finally posted on-line on October 30, 2018, the same day the Porter Ranch Neighborhood Council wrote to the CPUC regarding the alleged lack of disclosure of toxic crude oil. *Coincidence*?

Is this standard policy and procedure for DPH, to ignore formal request and sequester important health information and require community members, lawyers, and clinical researchers to force a disclosure?

Did the community know they were being showered with crude oil?

Not according to the Porter Ranch Neighborhood Council!

Letter from the Porter Ranch Neighborhood Council to the California Public Utilities Commission Oct. 30, 2018, emphasis added (Exhibit Y):

> *October 30, 2018*
>
> *Commissioners Picker, Peterman, Randolph, Guzman Aceves, and Rechtschaffen California Public Utilities Commission*
> *505 Van Ness Avenue*
> *San Francisco, California 94102*
>
> *Dear Commissioners:[1]*
>
> *As you well know, the Porter Ranch Neighborhood Council (PRNC), which is an elected body of representatives of the community of Porter Ranch, has been working closely with the PUC staff on the matter of the Aliso Canyon gas storage and processing facility after the disastrous rupture of well SS-25 in October 2015. We continue to be gravely concerned about the health and safety of our community, and we continue to call for the expedited and responsible closure of the Aliso Canyon Facility as called for by Governor Brown. However, recent **revelations** about the facility have so further outraged us that we wish to bring the matter directly to your attention.*
>
> *This year, the Aliso Canyon facility requires renewal of its Title V permit from the South Coast Air Quality Management District (SCAQMD), and the draft permit was issued by the SCAQMD for public review and comment.[2] The permit describes all the equipment used at the facility and their contents, and **we were surprised to find references to crude oil tanks.** When we inquired about the reason for storing crude oil at the site, SCAQMD staff informed us that **the facility does not use crude oil, but rather produces it**. **Specifically, since the gas storage reservoir is an abandoned oil reservoir, sufficient amounts of crude oil are pulled out with the gas that SoCalGas actively implements specific treatment systems to remove the crude oil from the gas before it is served into the system.***

The above revelation *means that SoCalGas clearly knew that the 100,000 metric tons of gas that were* ***discharged uncontrollably*** *from the field between October 23, 2015 through February 12, 2016* ***contained crude oil that was not removed from the gas but rather settled on and in our homes, schools, parks, and everywhere else. Yet, throughout the entire four months, SoCalGas intentionally withheld this information from the public and insisted that there were no long- term health effects for the people because the gas only contained methane and mercaptans, and methane is non-toxic, while the mercaptans are only irritants with minor short-term health effects. AT NO TIME during this entire event did SoCalGas tell the people of Porter Ranch and the North San Fernando Valley that the gas being spread over our community contained crude oil, when they knew exactly that it did because they otherwise have to remove it from the gas before they are allowed to use it. If this is not the epitome of corporate deception, we don't know what is!***

This is not a game of numbers and gas supply and demand. We are sure that none of you would tolerate having your children be sprayed with crude oil for four months while being lied to in the face about the content of that spray. ***Crude oil contains a laundry list of life-threatening chemicals with disastrous long-term health effects, including various forms of cancer.*** *How can that be acceptable to anyone? What happens the next time a gas well ruptures?* ***What will you tell the people who will be showered with crude oil*** *again?*

As commissioners, you have the awesome responsibility of overseeing the operation and conduct of all privately-held utilities in the State. ***We submit to you that you also have the moral authority – indeed the moral responsibility – to protect the lives of the people of California from the fraudulent and harmful conduct of the very utilities you oversee. This deceitful omission by SoCalGas should outrage you as much as it outrages us, and it should not stand. This company became the entity it is now because of the people of Southern California. Yet, it does not hesitate to deceive them for its own profits.***

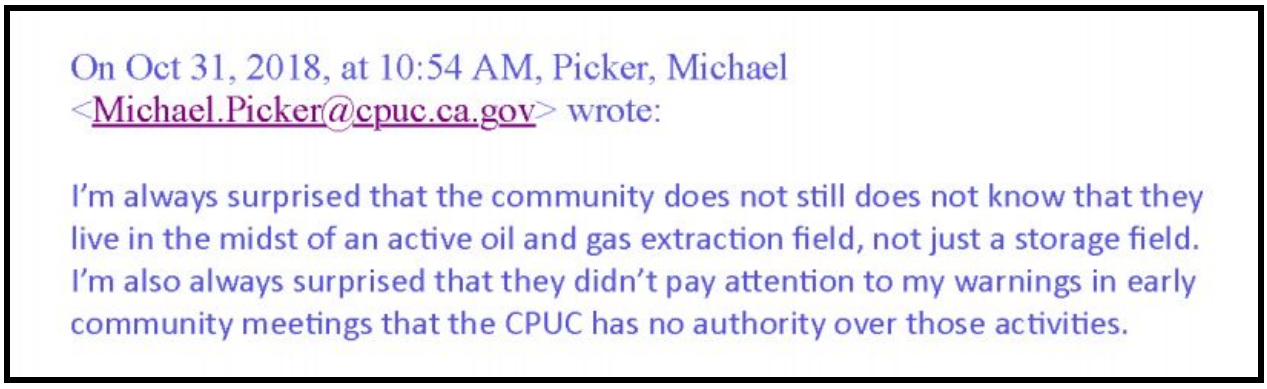
The disaster of Aliso Canyon is not behind us and its effects will linger for decades to come. It is time for the Commission to right this wrong. SoCalGas should not get away with what they have done. We urge you to take action now; adopt the Governor's directive and set in motion the process to shut down the Aliso Canyon facility sooner rather than later. You have the authority to modify the scope of I.17-02-002 and focus it on developing and implementing the steps needed to achieve the goal of closing down this facility.

We respectfully ask that you provide us with a written response to our request as soon as possible, but we hope that you will be on the right side of history and do the right thing by a community that did not ask for any of this, yet continues to pay the high price for all of it.

Respectfully Yours,
Porter Ranch Neighborhood Council

Issam Najm, Ph.D., P.E. President

In response to the above letter, there was a revealing email exchange between the author, Dr. Issam Najm and the then President of the CPUC, Michale Picker (click for link). Picker indicated that it was common knowledge among anyone working in or around Aliso Canyon to know of the presence of crude oil. See screen grab of his response is below.



On Oct 31, 2018, at 10:54 AM, Picker, Michael <Michael.Picker@cpuc.ca.gov> wrote:

I'm always surprised that the community does not still does not know that they live in the midst of an active oil and gas extraction field, not just a storage field. I'm also always surprised that they didn't pay attention to my warnings in early community meetings that the CPUC has no authority over those activities.

A more formal written response was also provided from the CPUC as follows.

CPUC's Response Nov. 7, 2018 (Exhibit Z)

> *November 7, 2018*
>
> *Dr. Issam Najm, Ph.D., P.E.*
> *President, Porter Ranch Neighborhood Council P.O. Box 7337*
> *Porter Ranch, CA 91327-7337*
>
> *With regard to whether crude oil constituents were released during the Aliso Canyon incident, the CPUC has primarily* ***been relying on the County of Los Angeles Health Department,*** *the* ***South Coast Air Quality Management District*** *and other agencies with* ***relevant expertise*** *to examine the air quality and* ***health impacts*** *of the discharge.* ***We also specifically asked the California Office of Environmental Health Hazard Assessment (OEHHA) to study the potential health hazards to nearby residents arising from the well-control materials used at Well SS-25 between October 2015 and February 2016. As you are aware, OEHH its report in May of this year.***
>
> *Working on the OEHHA report with that agency's scientists made me realize the* ***value of disclosing the chemical makeup*** *of methane leaks such as what occurred at Aliso Canyon.*
>
> *In addition to a root-cause analysis being conducted by an independent third-party expert, the CPUC is undertaking a full investigation of the incident, and will determine what, if any, appropriate enforcement action would need to be taken. We will take your comments about the company's communication during the incident into account as we look at the facts.*
>
> *We appreciate your continued advocacy on behalf of your community and your constructive engagement on all of these questions. This work is complex, multi-faceted, and time-intensive. It is important at times to step back from these complexities and be reminded today of the*

residents waiting for results of the various analyses we are undertaking. As a result, it is important to hear your frank viewpoint regularly to amplify the voice of the people we are empowered to serve.

Sincerely,

Commissioner Liane M. Randolph California Public Utilities Commission

cc:
Mr. Henry Stern, California State Senator, District 27
Mr. Robert Hertzberg, California State Senator, District 18
Mr. Dante Acosta, California Assemblymember, District 38
Mr. Jesse Gabriel, California Assemblymember, District 45
Mr. Brad Sherman, United States Representative, California 30th District
Dr. Robert Weisenmiller, Chair, California Energy Commission
Ms. Mary Nichols, Chair, California Air Resources Board
Ms. Kathryn Barger, Los Angeles County Supervisor
Mr. Angelo Bellomo, Los Angeles County Department of Public Health
Mr. Wayne Nastri, Executive Director, South Coast Air Quality Management District Mr. Mitchell Englander, Los Angeles City Councilman
Mr. Eric Garcetti, Mayor, City of Los Angeles

Points to Note:

As this letter points out, the CPUC has primarily **been relying on the County of Los Angeles Health Department,** the **South Coast Air Quality Management District** and other agencies with **relevant expertise** to examine the air quality and **health impacts** of the discharge. Yet, DPHs failure to do the proper due diligence to accurately assess the health risks and therefore, could not and did not inform the CPUC which potentially would have blocked the re-opening the facility. As noted in the CPUC's letter above as follows:

"We also specifically asked the California Office of Environmental Health Hazard Assessment (OEHHA) to study the potential health hazards to nearby residents arising from the well-control materials used at Well SS-25 between October 2015 and February 2016. As you are aware, OEHH published its report in May of this year."

DPH Files a Lawsuit!

On July 24, 2017 the County of Los Angeles filed an Ex Parte Application against DOGGR and So Cal Gas for a preliminary injunction to stop the reopening of Aliso Canyon. The emergent reason was that before the prohibition on injections could be lifted, So Cal Gas and DOGGR were required to determine all the necessary steps to ensure the safety of the facility had been met.

Specifically, the County of Los Angeles alleged that the facility was not safe because it rests upon the Santa Susana fault line and the risk of an earthquake could shear multiple wells at Aliso Canyon. The motion alleged that DOGGR and So Cal Gas approved the reopening of the well and injections without having a risk management plan in place and therefore the County was seeking an injunction to prevent the injection of natural gas into the well until all seismic testing was performed.

The County's filing of the Motion was completely disingenuous. No where are the health risks to the community from the blowout addressed. Rather the County points its fingers to DOGGR for failing to do its due diligence when they themselves never performed the proper health assessment.

There were so many health pillars to stand on and point out in this Motion but yet nothing is addressed.

This is another example of the egregious waste of taxpayers resources and is all a façade and deception on the part of the County.

Why didn't the County use its subpoena power?

Evidence of reckless disregard by the DPH including the Los Angeles County Board of Supervisors, is that they did not act within their full authority to protect the exposed community.

I learned that the County of Los Angeles has subpoena power on SoCalGas for the production of documents. For these government agencies, a subpoena can be served at any time and need not even be pursuant to an active litigation.

This means, that 4 years ago these government agencies could have mandated the disclosure of documentation pertaining to all chemicals emitted from the gas blowout! To date, no such subpoena has been issued...Why?

"What about UCLA's discovery and great concern for Particulate Matter?"

Was the community warned that they were inhaling particulate matter? **NO.** What was the chemical composition of the particulate matter? **Unknown, it was never tested!**

Yet another example of Don't Look, Don't Find and Don't Tell!

We know that Particular Matter are small particles made in combination from both solids and liquids. They are rated by size. The ultra-fine particles seem to be the most hazardous to the health of the human. The chemical constitution of particular manner is from hazardous air pollutants. There are **187** documented hazardous air pollutants that can cause disease and cancer in humans.

In the four years since the Aliso Canyon blowout no scientific institution or public agency has ever performed a chemical analysis of the specific Particulate Matter that was created from SS 25. The community would like to know what other hazardous chemicals they have been inhaling. Performing this chemical analysis could potentially have alleviated some of

the unknown chemical paradox created by Southern California Gas when they would not turn over all chemicals of exposure.

Then the Cover Up

Unfortunately, like most when it is discovered that one has made critical mistakes they take the low road and cover it up.

In my opinion, this is blatantly evident!

For perspective, watch Dr. Cyrus Rangan's testimony at the August 6, 2019 Joint Legislative Hearing here.

Did the Public Regulators Know the Community Was Being Showered With Crude Oil?

Well not according to **Angelo Bellomo, Deputy Director for Health Protection at Public Health**, in his letter to SCG. The full letter is in ***Exhibit P***. Below are excerpts in *blue italics*, emphasis added.

DPH (Angelo Bellomo) to Southern California Gas March 11, 2019.

> ***"The Los Angeles County Department of Public Health (Public Health) has been made aware,*** *through a permit renewal process required by the South Coast Air Quality Management District, of treatment systems utilized by Southern California Gas Company (SoCalGas) to remove crude oil routinely from natural gas before it is served into the distribution system.* ***We are disheartened by the fact that SoCalGas did not disclose this critical information regarding crude oil contained in its gas reservoir at the Aliso Canyon Storage Facility. Thus, the massive quantity of natural gas release from October 23, 2015 through February 12, 2016 contained crude oil, while SoCalGas repeatedly stated during the disaster that the contents of the release were limited only to typical components of stored natural gas."***
>
> *"During the Aliso Canyon Natural Gas Disaster,* ***Public Health conservatively operated under a hypothesis that natural gas in this geological storage reservoir was likely to contain traces of crude oil due to previous history of oil extraction from the reservoir.*** *In* ***November 2015,*** *Public Health* ***recommended*** *a complete characterization of air quality using an expanded list of chemicals typically* ***found in both in crude oil*** *and natural gas, but this testing was severely limited and delayed. At that time, SoCalGas knew that crude oil was contained in the natural gas but* ***withheld*** *this information from Public Health. SoCalGas had an obligation to inform Public Health about known crude oil in its stored natural gas, as this information would have critically impacted Public Health's assessment of human exposure during the Disaster."*
>
> *Whereas SoCalGas knowingly* ***released both crude oil and natural gas during the Disaster*** *without disclosing critical information to*

Public Health; ***whereas the health of nearby residents may have been impacted by exposure to both crude oil and natural gas during the Disaster;*** *and whereas Public Health requires critical information for the forthcoming Health Research Study, Public Health directs SoCalGas to provide the following:*

The Evidence Provides to the Contrary!

Please review the correspondence below which sets forth what the public regulators affirmatively knew and it was documented as early as March 6, 2016.

DPH to the Board of Supervisors March 6, 2016 (Exhibit Q)

Cynthia A. Harding Interim Director

STATUS REPORT ON THE ALISO CANYON GAS LEAK AND ITS IMPACT ON PORTER RANCH COMMUNITY

> *"**As early as December 17, 2015,** some residents reported the appearance of an **oily residue** being deposited on their cars, patio furniture, and other surfaces in their yards. Through the end of December, DPH received a total of 15 complaints from residents related to the **oily residue.** The residue was sampled and **tested**, and determined to consist of the relatively **long-chain hydrocarbons found in crude oil**. It appears that the substance was forced out of Well SS-25 in the form of liquid droplets, along with the flow of natural gas emanating from the well."*

GIS HEAL to the DPH July 22, 2016 (Exhibit I)

From the ***Wind*** Proposal:

> *"Further, there is some evidence that a source in the area is on-going. There are four lines of evidence: (1)* ***the observed oily residue****; (2) results from scanning electron microscopy; (3) data*

collected with SNAQ monitors; and (4) data collected with the DiSCmini monitors."

OEHHA to the community May 22, 2018 (Exhibit B-1)

"LACDPH also stated:

[SoCalGas] reported ***these drops are likely resulting from an oily mist emanating from the leaking well during strong wind events****. To further investigate the occurrence of the* ***oily mist****, [SoCalGas] has placed horizontal and vertical plexi-glass plates along the facility fence-line, immediately adjacent to the community.* ***The highest concentration of spots was found north of the Highlands neighborhood****, and [SoCalGas] has since installed screens over the leaking well, which are* ***designed to capture any new oily mists*** *that may occur."*

EVEN THE LACDPH OWN ADMISSION STATES THEY KNEW THE COMMUNITY WAS BEING SHOWERED UPON WITH CRUDE OIL!!

DPH to the community May 13, 2019 (Exhibit A)

Environmental Conditions and Health Concerns in Proximity to Aliso Canyon Following Permanent Closure of Well SS-25

"The temporal patterns suggest that the population living near well SS-25 could have been exposed to particles or aerosol oil droplets from the well."

Letter from SoCal Gas to Angelo Bellomo March 21, 2019 (Exhibit R)

"First, the fact that the storage wells at Aliso Canyon produce some residual oil in the course of normal storage operations is public knowledge. SoCalGas reports all such production data to the Division of Oil, Gas, and Geothermal Resources (DOGGR)…

Second, your letter admits, DPH has always been aware that the Aliso Canyon storage reservoir is a depleted oil bearing zone.

Third, SoCal gas informed the press, while the leak was ongoing, that oil "naturally occurring within the leaking well's reservoir" may have been released and that SoCalGas had implemented measures designed to capture such releases."

So Again,
Did DPH
Know of the Crude Oil?

The evidence says YES!

But Yet No Notifying the Community
and No Recommendations of the P100 Masks!

SCAQMD

In November 2017, I was elected through the Porter Ranch Neighborhood Council to be one of the two representatives for an advisory committee to the health study being conducted by the Southern California AQMD. They had obtained $1 million dollar award from a dispute resolution from Southern California Gas Company and we're initiating a health study. The first meeting was held in April 2018.

The meeting was public and was videotaped by members of the community. The consensus from the advisory committee was that the $1 million was markedly underfunded they would use it to repeat on studying the modeling of exposure. I was the only one in disagreement because the wind study was already completed by GIS HEAL and these issues have been addressed. But unfortunately, Public Health had sequestered the document from the public. Dr. Cyrus Rangan sat next to me in the meeting. When I questioned him as to the availability of the document, he stated it was on-line and available for viewing. This was not a truthful statement!

Proposal for CBC Study to SCAQMD and ALL Advisory members. May 15, 2018 (Exhibit S)

I advocated for the implementation of a medical surveillance study using patients complete blood counts, CBC. A proposal was drafted documenting a sound scientific foundation and sent to **all** members of the advisory committee.

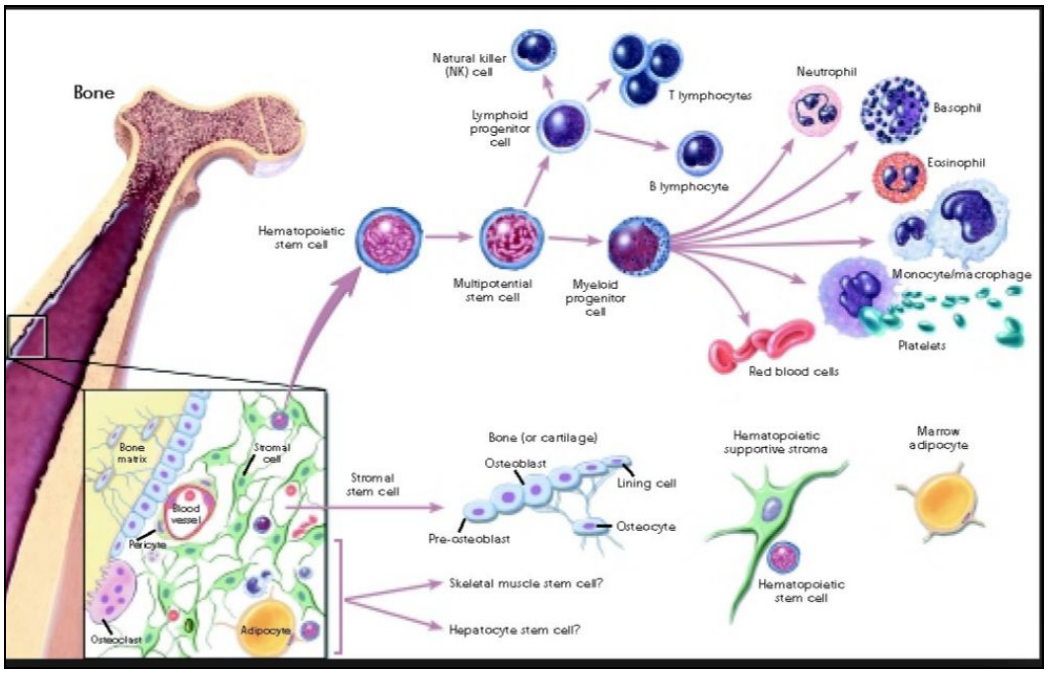
What was the feedback… ***None!***

I received no feedback whether negative or positive from any of the advisory members. This of course made me realize that predetermined agendas we're in play. The advisory committee was nothing but a facade.

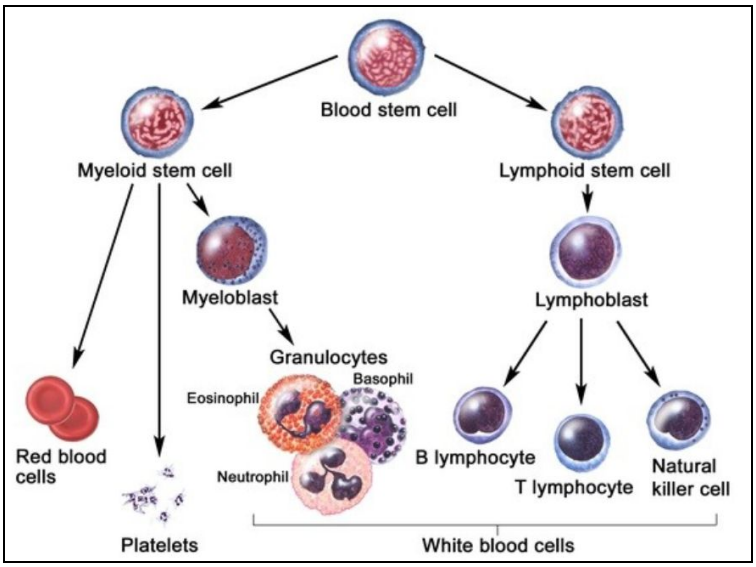
There has not been a second meeting in over two years and I still do not know what has become of the $1 million!?

Phase IV - CBC Medical Surveillance and Results

In order to understand the Aliso Canyon Medical Surveillance Study, I first need to walk you through how the body produces normal blood cells. We will focus on White Blood Cells, Red Blood Cells, and Platelets. As you can see in the bone marrow a single cell, known as a stem cell, is where all other cells are produced from.



All humans produce the 15 indices within the complete blood count. The indices relate to the numbers of cells, sizes, shapes, and concentrations of chemicals within the cells. They are either measured or calculated.



Sample of CBC Report:

TEST	RESULT	OUT OF RANGE	UNITS	REFERENCE RANGE
HEMATOLOGY (CBC)				
WBC	6.6		10^3/uL	4.0-11.0
RBC	5.08		10^6/uL	3.6-5.2
HGB	14.5		g/dL	12.0-16.0
HCT	44.5		%	37-47
MCV	87.5		fL	82.0-97.0
MCH	28.5		pg	27.0-34.0
MCHC	32.5		g/dL	31.0-35.0
RDW	14.3		%	11.8-15.2
PLATELETS	208		10^3/uL	150-400
MPV	9.8		fL	5.2-11.1
NEUTROPHILS %	66		%	45-75
LYMPHOCYTES %	23		%	15-50
MONOCYTES %	8		%	0-10
EOSINOPHILS %	3		%	0-5
BASOPHILS %	1		%	0-5

When the bone marrow is exposed to acute or chronic benzene toxicity you can see patterns of changes within the 15 indices. Again, the specific indices are: White Blood Cell count (WBC), Red Blood Cell count (RBC), and Platelet count. I also found some statistically significant changes in neutrophil counts as well as lymphocyte counts!

These patterns of changes are known as dysplasia and can lead to hematological cancers within that particular cell line. For example, myelodysplastic syndromes, leukemia, multiple myeloma, aplastic anemia, and lymphoma.

These are scientific facts and are well documented and supported in the literature as follows:

- www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10045
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3271273/
- www.nature.com/news/2004/041202/full/news041129-9.html
- https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/benzene
- https://www.ncbi.nlm.nih.gov/pubmed/10491799

Michael Jared, a PhD from the UCLA Department of Environmental Health has documented his support for this “Medical Surveillance” to particular residents in this community.

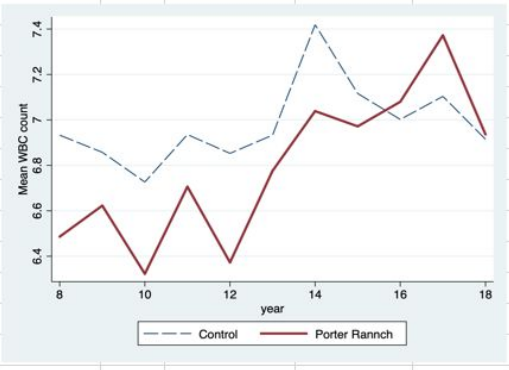
So since the advisory committee for SCAQMD’s Health study ignored my proposal, I initiated the “Aliso Canyon Medical Surveillance Study”.

Under HIPAA compliance, I received approximately 12,000 Complete Blood Counts inclusive of 15 indices for each CBC from Primex Laboratories. Knowing only the gender, age and zip code, approximately 4,500 CBCs were from the impacted 91326 zip code (Porter Ranch) for the period between 2008 and 2018 and were analyzed. There were approximately 7,300 CBCs that were analyzed from three controlled groups from the following ZIP Codes: 90265 (Malibu), 93534 (Lancaster), and 93012 (Camarillo). The control ZIP Codes are geographically not associated with oil/gas storage operations or storage. All patients were 18 and above so in essence we look at the adult population only.

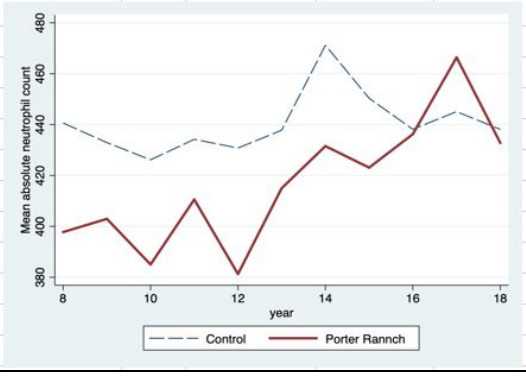
Findings: The 91326 ZIP Code patient population shows a statistically significant average lower **for all three indices**, white blood cell count, red blood cell count, and platelet count as compared to the controls for particular years.

WBC and associated Absolute Neutrophil

Average WBC among adults (18+)					
	Controls		Porter Ranch		p value
2008	67	6.9 (2.4)	94	6.5 (1.9)	0.19
2009	113	6.9 (2.3)	101	6.6 (2.3)	0.46
2010	157	6.7 (2.1)	123	6.3 (2.0)	0.10
2011	253	6.9 (2.1)	181	6.7 (2.7)	0.32
2012	424	6.9 (2.0)	304	6.4 (2.1)	<0.01
2013	893	6.9 (2.3)	622	6.8 (2.2)	0.19
2014	978	7.4 (2.6)	633	7.0 (2.3)	<0.01
2015	1118	7.1 (2.1)	567	7.0 (2.2)	0.19
2016	1244	7.0 (2.3)	729	7.1 (2.4)	0.47
2017	1302	7.1 (2.4)	761	7.4 (2.5)	0.01
2018	716	6.9 (2.3)	358	6.9 (2.2)	0.89
Total	7,265		4,473	11,738	



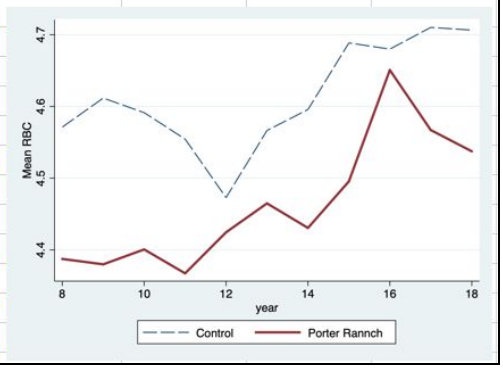
Average absolute neutrophil count among adults (18+)					
	Controls		Porter Ranch		p value
2008	67	441 (199)	94	398 (160)	0.13
2009	113	433 (195)	101	403 (185)	0.25
2010	157	426 (178)	123	385 (161)	0.05
2011	253	434 (179)	181	411 (242)	0.24
2012	424	431 (172)	304	381 (166)	<0.01
2013	893	438 (193)	622	415 (172)	0.02
2014	978	471 (228)	633	432 (192)	<0.01
2015	1114	450 (177)	566	423 (183)	<0.01
2016	1244	438 (186)	729	436 (193)	0.83
2017	1302	445 (184)	761	466 (214)	0.02
2018	716	438 (189)	358	358 (184)	0.66



RBC and associated Hemoglobin and Hematocrit

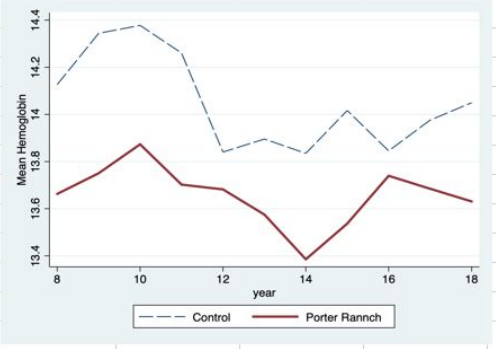
Average RBC among adults (18+)

	Controls		Porter Ranch		p value
2008	67	4.57 (0.40)	94	4.39 (0.46)	0.01
2009	113	4.61 (0.45)	101	4.38 (0.50)	<0.01
2010	157	4.59 (0.42)	123	4.40 (0.52)	<0.01
2011	253	4.55 (0.46)	181	4.37 (0.51)	<0.01
2012	424	4.47 (0.52)	304	4.42 (0.55)	0.22
2013	893	4.57 (0.53)	622	4.46 (0.58)	<0.01
2014	978	4.60 (0.54)	633	4.43 (0.58)	<0.01
2015	1114	4.69 (0.52)	566	4.50 (0.58)	<0.01
2016	1244	4.68 (0.60)	729	4.65 (0.59)	0.29
2017	1302	4.71 (0.57)	761	4.57 (0.60)	<0.01
2018	716	4.71 (0.58)	358	4.54 (0.63)	<0.01



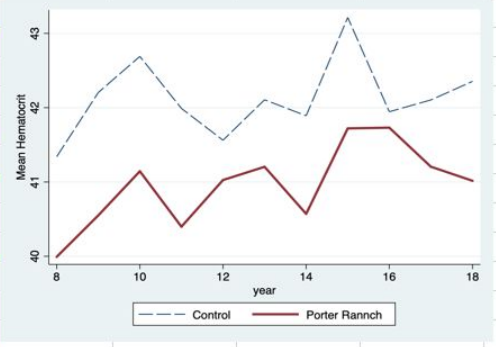
Average Hemoglobin among adults (18+)

	Controls		Porter Ranch		p value
2008	67	14.1 (1.3)	94	13.7 (1.3)	0.03
2009	113	14.3 (1.3)	101	13.8 (1.4)	<0.01
2010	157	14.4 (1.2)	123	13.9 (1.4)	<0.01
2011	253	14.3 (1.4)	181	13.7 (1.4)	<0.01
2012	424	13.8 (1.6)	304	13.7 (1.5)	0.18
2013	893	13.9 (1.6)	622	13.6 (1.5)	<0.01
2014	978	13.8 (1.6)	633	13.4 (1.6)	<0.01
2015	1114	14.0 (1.6)	566	13.5 (1.6)	<0.01
2016	1244	13.8 (1.7)	729	13.7 (1.6)	0.18
2017	1302	13.7 (1.6	761	13.7 (1.7)	<0.01
2018	716	14.0 (1.7)	358	13.6 (1.7)	<0.01



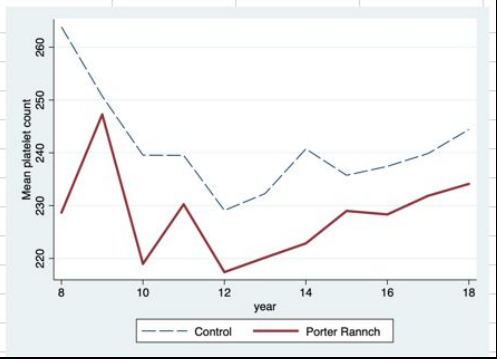
Average Hematocrit among adults (18+)

	Controls		Porter Ranch		p value
2008	67	41.3 (3.7)	94	40.0 (3.8)	0.03
2009	113	42.2 (4.0)	101	40.6 (4.2)	<0.01
2010	157	41.7 (3.6)	123	41.1 (4.1)	<0.01
2011	253	42.0 (4.0)	181	40.4 (3.9)	<0.01
2012	424	41.6 (4.5)	304	41.0 (4.4)	0.11
2013	893	42.1 (4.7)	622	41.2 (4.5)	<0.01
2014	978	41.9 (4.8)	633	40.6 (4.7)	<0.01
2015	1114	43.2 (4.6)	566	41.7 (4.8)	<0.01
2016	1244	41.9 (5.1)	729	41.7 (4.6)	0.35
2017	1302	42.1 (4.6)	761	41.2 (5.0)	<0.01
2018	716	42.3 (4.9)	358	41.0 (5.1)	<0.01



Platelet Count

Average platelet count among adults (18+)					
	Controls		Porter Ranch		p value
2008	67	264 (72)	94	229 (49)	<0.01
2009	113	251 (69)	101	247 (78)	0.73
2010	157	240 (64)	123	219 (66)	0.01
2011	253	240 (57)	181	230 (64)	0.11
2012	424	229 (62)	304	217 (65)	0.01
2013	893	232 (63)	622	220 (59)	<0.01
2014	978	241 (72)	634	223 (64)	<0.01
2015	1118	236 (64)	567	229 (66)	0.04
2016	1244	237 (73)	720	228(64)	0.01
2017	1302	240 (73)	761	232 (67)	0.01
2018	716	244 (75)	358	234 (67)	0.03



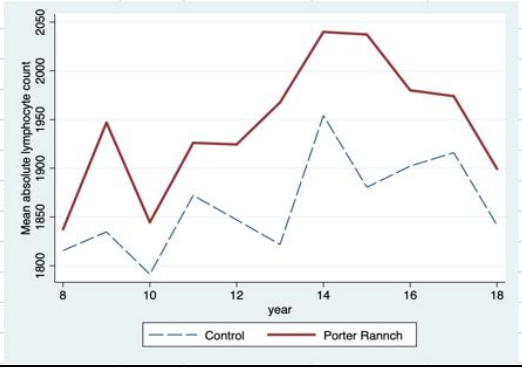
Why is this Important?

These changes represent bone marrow suppression which can potentially lead to diseases and hematological cancers (anemia, leukemias, multiple myeloma, and aplastic anemia).

Lymphocytes

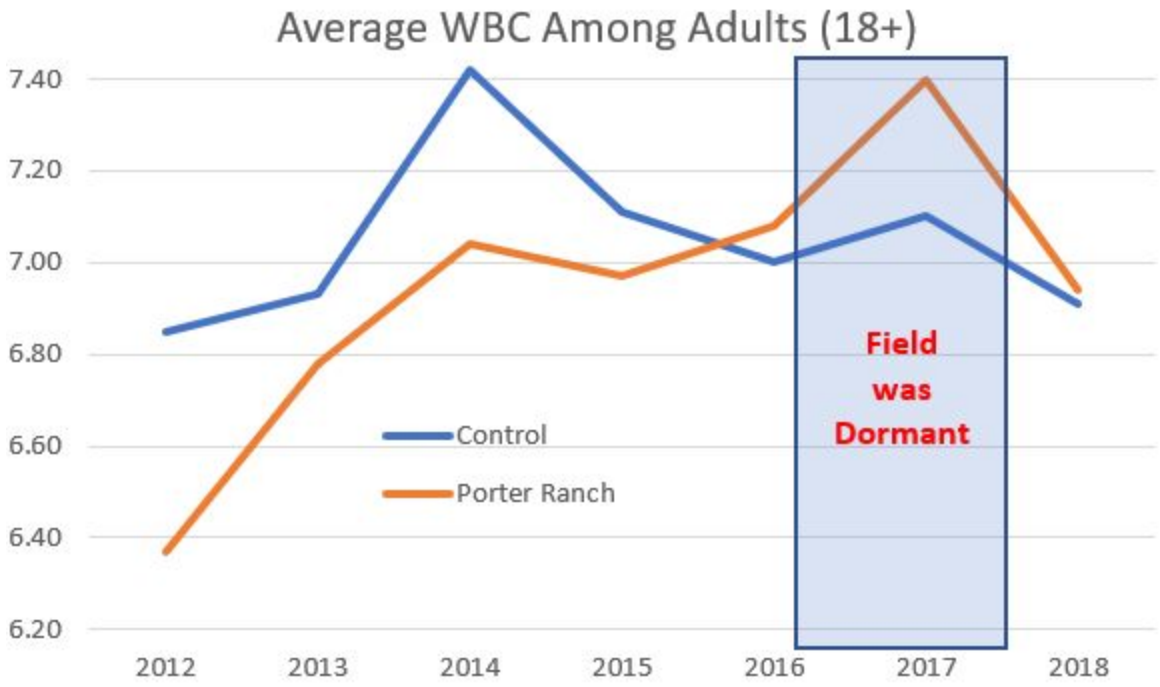
What was also very concerning to me is that the average lymphocyte count was statistically significantly **greater** than that of the controls. This could potentially represent bone marrow stress and precancerous changes within the cell line.

Average absolute lymphocytes among adults (18+)					
	Controls		Porter Ranch		p value
2008	67	1816 (568)	94	1837 (604)	0.82
2009	113	1835 (592)	101	1947 (606)	0.17
2010	157	1791 (563)	123	1845 (708)	0.48
2011	253	1872 (550)	181	1926 (621)	0.34
2012	424	1847 (623)	304	1924 (766)	0.13
2013	893	1822 (636)	622	1968 (1077)	<0.01
2014	978	1954 (692)	633	2040 (835)	0.03
2015	1114	1881 (685)	566	2037 (703)	<0.01
2016	1244	1902 (870)	729	1980 (878)	0.06
2017	1302	1916 (721)	761	1974 (852)	0.10
2018	716	1841 (916)	358	1899 (715)	0.30



This data was reviewed by a leading benzene expert here in California and was assessed as **"chronic benzene exposure"**.

A very important point to note is that **all three indices**, WBC, RBC, and Platelet Count recovered and seem to correlate in timing to the inactivity of Aliso Canyon in 2016 and then again dropped shortly thereafter the re-opening of the facility in mid-2017. WBCs impact to the field's dormant period is demonstrated below:



QUEST

I wished to augment these results by obtaining more data and analyzing the pediatric population because as a basic scientific principle, **children are at higher health risk to benzene exposure.** Therefore, between November 29, 2018 and August 9, 2019, I negotiated in good faith with Quest diagnostic laboratories, a larger lab to produce to me the simple CBC data with automated differentials to me for the ACMSS.

Proposal to Quest Diagnostic Laboratory Aug 19, 2018 *(Exhibit T)*

The requested CBC data targeted specific zip codes in the North San Fernando Valley, California including: 91326; 90265; 91505; 90293; 90245; 93012 and 93534 for patients ages 5 years old and up.
I requested the non-identifying scientific data to be sent to my HIPAA compliant email server, which does not violate patient privacy rights.
A conversation occurred in which I was questioned, are you working with the department of public health" my reply, no it was my opinion they cannot be trusted. Within 2 weeks I was informed that I would not be receiving any data from Quest on the basis that **"it is not a priority"**.

On November 29, 2018, I sent a letter of appeal to Michael McPhaul, M.D. a physician at Quest regarding Quest's refusal to disclose such information.

Appeal letter to Dr. McPhaul at Quest Diagnostics. Nov. 29, 2018 (Exhibit U)

On December 4, 2018, I received a telephone voicemail response from Dr. McPhaul that Quest "*could not marshal the resources to provide the requested information*" to me for my study. As healthcare provider and clinical investigator, I am obligated to advocate for the health of the exposed community by evaluating, interpreting and providing the scientific analysis of my findings.

Further, Quests goal statement addresses collaboration and provides: "We believe in teamwork and the **limitless possibilities of collaborative energy**. We achieve excellence by putting **collective goals ahead of personal interests.** We support and encourage open communication and meaningful cooperation **among colleagues from varying backgrounds and disciplines."**

There is no logical, legal, ethical, or financial reason that exists for Quest to withhold the requested data, which has the tremendous potential to help many people in the community.

At the present time the people of this community deserve a proper due diligence so they can make an **informed decision** whether or not they wish to stay in this community and expose their families to such toxins. Was Quest in communication with the DPH and not giving us the data based on conversations? This question of whether Quest was in communication with the Los Angeles DPH and California DPH was posed to Quest counsel in early 2019 and remains unanswered.

Conclusion

In light of the **nation's worst natural gas** disaster this country has ever seen, the community was in need of our public regulators and politicians for protection and full disclosure of the health impacts caused from the massive blowout. The Department of Public Health (DPH) was at the center of this hub as stated in public testimony from Cyrus Rangan M.D., that the DPH is the "only agency that can make health assessments."

As a basic medical principal, disclosure of the risks and benefits is the sole responsibility of any treating health care provider. Why should this be any different when the physicians are working within a public agency?

Public Statement by LADPH:

> ***"Everyone should have what they need to be healthy. Join our movement to build thriving communities for all!"***

So I ask you, Is this what you received?

The leaders of these public agencies are referred to as "civil servants," that is members who are to serve the people but somewhere along the way, these public agencies have evolved into dictators without accountability. Instead of receiving proper pure scientific due diligence you have received:

1. concealment;
2. deception; and,
3. fraudulent behavior.

The science has been poisoned, much like this community has been with toxins. In my opinion, personal political agendas have been inspired by money and deplorably permitted and allowed by backdoor politics. It is the only way that I can account for the unethical behavior.

Here are some questions to think about.

- Where are we today, 4 years after the blowout?
- Do we know what long-term health effects to look for?
- Have we learned anything and what changes have been made?
- Are we prepared when it happens again (i.e. earthquake)?
- Are these the agencies/personnel we want in place if the blowout occurs again?

Additional questions for you to ponder…

- Who is behind all of this, who's the **master puppeteer**?!
- Should a full investigation be initiated?

The goal of this document was to disclose to you everything that I know… because I believe in full transparency.

Now you know… you the people, you the media, you the plaintiffs' attorneys, you the politician's and yes even the regulators.

I lay this at your door-step!

Now what will you do with it?

Respectfully,

Jeffery Nordella M.D.